



\*\*\*tuberculosis\*\*\* complex but absent in BCG. HLA-B52-restricted peptide-specific interferon-[gamma] release and lytic activity were exhibited by CTLs, which recognized endogenously processed antigen. These results indicate that \*\*\*CD8\*\*\* + CTLs specific for mycobacterial and protozoal antigens are induced during natural infections in humans.

L3 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:582045 CAPLUS  
DN 141:258999  
TI Characterization of a Mycobacterium \*\*\*tuberculosis\*\*\* Peptide That Is Recognized by Human CD4+ and \*\*\*CD8\*\*\* + T Cells in the Context of Multiple HLA Alleles  
AU Shams, Homayoun; Klucar, Peter; Weis, Steven E.; \*\*\*Lalvani, Ajit\*\*\* ; Moonan, Patrick K.; Safi, Hassan; Wizel, Benjamin; Ewer, Katie; Nepom, Gerald T.; Lewinsohn, David M.; Andersen, Peter; Barnes, Peter F.  
CS Center for Pulmonary and Infectious Disease Control, and Departments of Microbiology, and Immunology, University of Texas Health Center, Tyler, TX, 75708, USA  
SO Journal of Immunology (2004), 173(3), 1966-1977  
CODEN: JOIMA3; ISSN: 0022-1767  
PB American Association of Immunologists  
DT Journal  
LA English  
AB The secreted Mycobacterium \*\*\*tuberculosis\*\*\* 10-kDa culture filtrate protein (CFP)10 is a potent T cell Ag that is recognized by a high percentage of persons infected with M. \*\*\*tuberculosis\*\*\*. The authors detd. the mol. basis for this widespread recognition by identifying and characterizing a 15-mer peptide, CFP1071-85, that elicited IFN-.gamma. prodn. and CTL activity by both CD4+ and \*\*\*CD8\*\*\* + T cells from persons expressing multiple MHC class II and class I mols., resp. CFP1071-85 contained at least two epitopes, one of 10 aa (peptide T1) and another of 9 aa (peptide T6). T1 was recognized by CD4+ cells in the context of DRB1\*04, DR5\*0101, and DQB1\*03, and by \*\*\*CD8\*\*\* + cells of A2+ donors. T6 elicited responses by CD4+ cells in the context of DRB1\*04 and DQB1\*03, and by \*\*\*CD8\*\*\* + cells of B35+ donors. Deleting a single amino acid from the amino or carboxy terminus of either peptide markedly reduced IFN-.gamma. prodn., suggesting that they are minimal epitopes for both CD4+ and \*\*\*CD8\*\*\* + cells. As far as the authors are aware, these are the shortest microbial peptides that have been found to elicit responses by both T cell subpopulations. The capacity of CFP1071-85 to stimulate IFN-.gamma. prodn. and CTL activity by CD4+ and \*\*\*CD8\*\*\* + cells from persons expressing a spectrum of MHC mols. suggests that this peptide is an excellent candidate for inclusion in a subunit antituberculosis vaccine.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:716868 CAPLUS  
DN 137:246533  
TI Mycobacterium \*\*\*tuberculosis\*\*\* epitopes in vaccines and detection of mycobacterial-specific cytotoxic T-cells  
IN \*\*\*Lalvani, Ajit\*\*\* ; Pathan, Ansar A.; Hill, Adrian V. S.  
PA UK  
SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 467,893, abandoned.  
CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2002131976	A1	20020919	US 2001-916201	20010727	
	US 2004141985	A1	20040722	US 2003-721798	20031126	
PRAI	US 1998-113783P	P	19981223			
	US 1999-467893	B2	19991221			
	US 2001-916201	B3	20010727			
AB	A method of detecting an anti-mycobacterial ***CD8*** T cell response comprising contacting a population of ***CD8*** T cells of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO: 1 and/or 2, wherein one or more of said peptides may be substituted by an analog which binds a T cell receptor which recognizes the corresponding substituted peptide, and detg. whether ***CD8*** T cells of the ***CD8*** T cell population recognize the peptide(s). The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a ***CD8*** T cell response, comprising administering (i) a ***CD8*** T cell epitope of a mycobacterium protein, (ii) an analog of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii). The method of detecting ***CD8*** T cells is an ELISPOT assay which detects interferon-.gamma., released by the T cells following peptide recognition, using an immobilized anti-IFN-.gamma. antibody.					

L3 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:651305 CAPLUS

DN 133:320816

TI High frequencies of circulating IFN-.gamma.-secreting \*\*\*CD8\*\*\* cytotoxic T cells specific for a novel MHC class I-restricted Mycobacterium \*\*\*tuberculosis\*\*\* epitope in M. \*\*\*tuberculosis\*\*\*-infected subjects without disease

AU Pathan, Ansar A.; Wilkinson, Katalin A.; Wilkinson, Robert J.; Latif, Mohammed; McShane, Helen; Pasvol, Geoffrey; Hill, Adrian V. S.; \*\*\*Lalvani, Ajit\*\*\*

CS Institute of Molecular Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Oxford, UK

SO European Journal of Immunology (2000), 30(9), 2713-2721  
CODEN: EJIMAF; ISSN: 0014-2980

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

AB MHC class I-restricted \*\*\*CD8\*\*\* cytotoxic T lymphocytes (CTL) are essential for protective immunity to Mycobacterium \*\*\*tuberculosis\*\*\* in animal models but their role in humans remains unclear. The authors therefore studied subjects who had successfully contained M. \*\*\*tuberculosis\*\*\* infection in vivo, i.e. exposed healthy household contacts and individuals with inactive self-healed pulmonary \*\*\*tuberculosis\*\*\*. Using the ELISPOT assay for IFN-.gamma., the authors screened peptides from ESAT-6, a secreted antigen that is highly specific for M. \*\*\*tuberculosis\*\*\*. The authors identified a novel nonamer epitope: unstimulated peripheral blood-derived \*\*\*CD8\*\*\* T

cells displayed peptide-specific IFN-.gamma. release ex vivo while \*\*\*CD8\*\*\* T cell lines and clones exhibited HLA-A68.02-restricted cytolytic activity and recognized endogenously processed antigen. The frequency of \*\*\*CD8\*\*\* CTL specific for this single M.

\*\*\*tuberculosis\*\*\* epitope, 1/2500 peripheral blood lymphocytes, was equiv. to the combined frequency of all IFN-.gamma.-secreting purified protein deriv.-reactive T cells ex vivo. This highly focused CTL response was maintained in an asymptomatic contact over 2 yr and is the most potent antigen-specific antimycobacterial \*\*\*CD8\*\*\* CTL response hitherto described. Thus, human M. \*\*\*tuberculosis\*\*\* -specific \*\*\*CD8\*\*\* CTL are not necessarily assocd. with active disease per se. Rather, the authors' results are consistent with a protective role for these ESAT-6-specific \*\*\*CD8\*\*\* T cells in the long-term control of M. \*\*\*tuberculosis\*\*\* in vivo in humans.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1999:31167 CAPLUS  
DN 130:195477  
TI 38000 MW antigen-specific major histocompatibility complex class I restricted interferon-.gamma.-secreting \*\*\*CD8\*\*\* + T cells in healthy contacts of \*\*\*tuberculosis\*\*\*  
AU Wilkinson, R. J.; Zhu, X.; Wilkinson, K. A.; \*\*\*Lalvani, A.\*\*\* ; Ivanyi, J.; Pasvol, G.; Vordermeier, H. M.  
CS Tuberculosis and Related Infections Unit, Clinical Sciences Centre, Imperial College School of Medicine, Hammersmith Hospital, London, UK  
SO Immunology (1998), 95(4), 585-590  
CODEN: IMMUAM; ISSN: 0019-2805  
PB Blackwell Science Ltd.  
DT Journal  
LA English  
AB \*\*\*CD8\*\*\* + T lymphocytes are required to protect mice against *Mycobacterium* \*\*\*tuberculosis\*\*\*, although in early infection the mechanism appears not to be via perforin or granzyme-mediated lysis of the infected target, and may be via interferon-.gamma. (IFN-.gamma.) prodn. We therefore investigated whether \*\*\*CD8\*\*\* + T cells specific for the immunoprotective 38 000 MW antigen of M. \*\*\*tuberculosis\*\*\* could be detected in infected humans. Using a recombinant vaccinia virus expressing the 38 000 MW antigen of M. \*\*\*tuberculosis\*\*\* (rV38) and a control vaccinia virus (rVras) we demonstrated that both viruses stimulated IFN-.gamma. prodn. from freshly isolated peripheral blood mononuclear cells (PBMC) in a 36-h enzyme-linked immunospot assay. Cell depletion and antibody blockade established that the bulk of the 38000 MW antigen-specific IFN-.gamma. response was mediated by \*\*\*CD8\*\*\* +, major histocompatibility complex class I-restricted T cells, whereas the anti-vaccinia virus response was predominantly mediated by CD4+ T cells. In further evaluations PBMC from all seven healthy \*\*\*tuberculosis\*\*\* -exposed contacts had a 38000 MW antigen-specific IFN-.gamma. response, whereas seven patients with untreated sputum-pos. pulmonary \*\*\*tuberculosis\*\*\* had very low levels of 38000 antigen-specific IFN-.gamma.-producing cells. These preliminary observations demonstrate the utility of recombinant vaccinia viruses in restimulating freshly isolated CD4+ and \*\*\*CD8\*\*\* + T cells. The bias towards a higher frequency of IFN-.gamma.-producing \*\*\*CD8\*\*\* + T cells in contacts rather than patients may indicate a protective role for \*\*\*CD8\*\*\* + cells in human \*\*\*tuberculosis\*\*\*.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:388685 CAPLUS  
DN 129:26989  
TI Assay method for peptide specific T-cells  
IN \*\*\*Lalvani, Ajit\*\*\* ; Brookes, Roger Hamilton  
PA Isis Innovation Limited, UK; Lalvani, Ajit; Brookes, Roger Hamilton  
SO PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9823960	A1	19980604	WO 1997-GB3222	19971125
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2272881	AA	19980604	CA 1997-2272881	19971125
	AU 9850632	A1	19980622	AU 1998-50632	19971125
	AU 728357	B2	20010104		
	EP 941478	A1	19990915	EP 1997-913336	19971125
	EP 941478	B1	20020206		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI				
	JP 2001505568	T2	20010424	JP 1998-524410	19971125
	EP 1152012	A1	20011107	EP 2001-109298	19971125
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI				
	AT 213068	E	20020215	AT 1997-913336	19971125
	ES 2172773	T3	20021001	ES 1997-913336	19971125
	AU 765013	B2	20030904	AU 2001-33441	20010402
PRAI	GB 1996-24456	A	19961125		
	AU 1998-50632	A3	19971125		
	EP 1997-913336	A3	19971125		
	WO 1997-GB3222	W	19971125		
AB	A method of assaying for peptide-specific T-cells comprises adding peptide to a fluid sample of fresh peripheral blood mononuclear cells, and detecting a cytokine such as interferon-.gamma. produced by T-cells that have been pre-sensitized to the peptide. The assay method is quick and cheap and is expected to be useful for the study of various disease states including Hepatitis B, Hepatitis C, ***tuberculosis***, malaria, HIV and influenza.				

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:33912 CAPLUS  
DN 128:139656  
TI Human cytolytic and interferon .gamma.-secreting \*\*\*CD8\*\*\* + T lymphocytes specific for Mycobacterium \*\*\*tuberculosis\*\*\*  
AU \*\*\*Lalvani, Ajit\*\*\* ; Brookes, Roger; Wilkinson, Robert J.; Malin, Adam S.; Pathan, Ansar A.; Andersen, Peter; Dockrell, Hazel; Pasvol, Geoffrey; Hill, Adrian V. S.  
CS Molecular Immunology Group, Institute of Molecular Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Oxford, OX3 9DU, UK  
SO Proceedings of the National Academy of Sciences of the United States of

America (1998), 95(1), 270-275  
CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AB Protective immunity to M. \*\*\*tuberculosis\*\*\* is poorly understood, but mounting evidence, at least in animal models, implicates major histocompatibility complex class I-restricted \*\*\*CD8\*\*\* + T cells as an essential component. By using a highly sensitive assay for single cell interferon .gamma. release, the authors screened an array of M.

\*\*\*tuberculosis\*\*\* antigen-derived peptides congruent with HLA class I allele-specific motifs. The authors identified \*\*\*CD8\*\*\* + T cells specific for epitopes in the early secretory antigenic target 6 during active \*\*\*tuberculosis\*\*\*, after clin. recovery and in healthy contacts. Unrestimulated cells exhibited peptide-specific interferon .gamma. secretion, whereas lines or clones recognized endogenously processed antigen and showed cytolytic activity. These results provide direct evidence for the involvement of \*\*\*CD8\*\*\* + cytotoxic T lymphocytes in host defense against M. \*\*\*tuberculosis\*\*\* in humans and support current attempts to generate protective cytotoxic T lymphocyte responses against M. \*\*\*tuberculosis\*\*\* by vaccination.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 13 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2005016548 EMBASE

TI Ex vivo characterization of early secretory antigenic target 6-specific T cells at sites of active disease in pleural \*\*\*tuberculosis\*\*\*.

AU Wilkinson K.A.; Wilkinson H.J.; Pathan A.; Ewer K.; Prakash M.; Kleenerman P.; Maskell N.; Davies R.; Pasvol G.; \*\*\*Lalvani A.\*\*\*

CS Dr. A. Lalvani, Nuffield Dept. of Clinical Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX3 9DU, United Kingdom.  
ajit.lalvani@ndm.ox.ac.uk

SO Clinical Infectious Diseases, (1 Jan 2005) 40/1 (184-187).

Refs: 14

ISSN: 1058-4838 CODEN: CIDIEL

CY United States

DT Journal; Article

FS 005 General Pathology and Pathological Anatomy  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
026 Immunology, Serology and Transplantation

LA English

SL English

AB Presence of early secretory antigenic target-6 (ESAT-6)-specific, interferon-.gamma.-secreting T cells in blood accurately marks \*\*\*tuberculosis\*\*\* infection. In tuberculous pleural effusions from 10 patients with \*\*\*tuberculosis\*\*\*, these cells were concentrated a mean of 15-fold (standard deviation, .+- .6-fold), relative to their level in peripheral blood (P = .014), and displayed rapid effector function. Such cells were absent in 8 control patients with nontuberculous pleural disease. The recruitment of ESAT-6-specific T cells to inflamed tuberculous tissue demonstrates their function in vivo and suggests a novel way to diagnose tuberculous pleuritis.

L3 ANSWER 9 OF 13 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2002339692 EMBASE  
TI \*\*\*CD8\*\*\* cytotoxic T cells and the development of new  
\*\*\*tuberculosis\*\*\* vaccines.  
AU \*\*\*Lalvani A.\*\*\*  
CS A. Lalvani, Nuffield Dept. of Clinical Medicine, University of Oxford,  
John Radcliffe Hospital, Oxford, United Kingdom  
SO American Journal of Respiratory and Critical Care Medicine, (15 Sep 2002)  
166/6 (789-790).  
Refs: 12  
ISSN: 1073-449X CODEN: AJCMED  
CY United States  
DT Journal; Editorial  
FS 004 Microbiology  
005 General Pathology and Pathological Anatomy  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
026 Immunology, Serology and Transplantation  
LA English  
L3 ANSWER 10 OF 13 MEDLINE on STN  
AN 2002470334 MEDLINE  
DN PubMed ID: 12231485  
TI \*\*\*CD8\*\*\* cytotoxic T cells and the development of new  
\*\*\*tuberculosis\*\*\* vaccines.  
CM Comment on: Am J Respir Crit Care Med. 2002 Sep 15;166(6):843-8. PubMed  
ID: 12231495  
AU \*\*\*Lalvani Ajit\*\*\*  
SO American journal of respiratory and critical care medicine, (2002 Sep 15)  
166 (6) 789-90.  
Journal code: 9421642. ISSN: 1073-449X.  
CY United States  
DT Commentary  
Editorial  
LA English  
FS Abridged Index Medicus Journals; Priority Journals  
EM 200210  
ED Entered STN: 20020917  
Last Updated on STN: 20021012  
Entered Medline: 20021011  
L3 ANSWER 11 OF 13 SCISEARCH. COPYRIGHT (c) 2005 The Thomson Corporation.  
on STN  
AN 2003:504916 SCISEARCH  
GA The Genuine Article (R) Number: 669TR  
TI Identification of M- \*\*\*Tuberculosis\*\*\* peptides that are recognized by  
human CD4+ and \*\*\*CD8\*\*\* + T-cells from persons expressing different  
HLA alleles  
AU Shams H (Reprint); Klucar P; Weis S E; \*\*\*Lalvani A\*\*\* ; Safi H; Wizel  
B; Moonan P K; Ewer K; Barnes P F  
CS Univ Texas Hlth Ctr, Tyler, TX 75708 USA; Univ N Texas, Hlth Sci Ctr, Ft  
Worth, TX USA; Univ Oxford, John Radcliffe Hosp, Oxford OX3 9DU, England  
CYA USA; England  
SO FASEB JOURNAL, (14 APR 2003) Vol. 17, No. 7, Supp. [S], pp. C27-C27.  
Publisher: FEDERATION AMER SOC EXP BIOL, 9650 ROCKVILLE PIKE, BETHESDA, MD  
20814-3998 USA.  
ISSN: 0892-6638.  
DT Conference; Journal  
LA English

REC Reference Count: 0

L3 ANSWER 12 OF 13 USPATFULL on STN  
AN 2004:184102 USPATFULL  
TI \*\*\*Tuberculosis\*\*\* vaccine  
IN \*\*\*Lalvani, Ajit\*\*\* , Oxford, UNITED KINGDOM  
Pathan, Ansar A., Oxford, UNITED KINGDOM  
PA ISIS INNOVATION LIMITED, Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2004141985 A1 20040722  
AI US 2003-721798 A1 20031126 (10)  
RLI Division of Ser. No. US 2001-916201, filed on 27 Jul 2001, ABANDONED  
Continuation-in-part of Ser. No. US 1999-467893, filed on 21 Dec 1999,  
ABANDONED  
PRAI US 1998-113783P 19981223 (60)  
DT Utility  
FS APPLICATION  
LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 1505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of detecting an anti-mycobacterial \*\*\*CD8\*\*\* T cell response comprising contacting a population of \*\*\*CD8\*\*\* T cells of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO: 1 and/or 2, wherein one or more of said peptides may be substituted by an analogue which binds a T cell receptor which recognises the corresponding substituted peptide, and determining whether \*\*\*CD8\*\*\* T cells of the \*\*\*CD8\*\*\* T cell population recognize the peptide(s).

The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a \*\*\*CD8\*\*\* T cell response, comprising administering (i) a \*\*\*CD8\*\*\* T cell epitope of a mycobacterium protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

L3 ANSWER 13 OF 13 USPATFULL on STN  
AN 2004:76621 USPATFULL  
TI Assay to determine efficacy of treatment for mycobacterial infection  
IN \*\*\*Lalvani, Ajit\*\*\* , John Radcliffe Hospital Headington, UNITED  
KINGDOM  
PI US 2004058399 A1 20040325  
AI US 2003-451918 A1 20031023 (10)  
WO 2002-GB55 20020108  
PRAI GB 2001-432 20010108  
DT Utility  
FS APPLICATION  
LREP Nixon & Vanderhye, 8th Floor, 1100 North Glebe Road, Arlington, VA,  
22201-4714  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 1601

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Method of determining the efficacy of treatment for mycobacterial infection in an individual comprising determining in samples from the individual whether the level of T cells specific for a mycobacterial antigen has decreased after the treatment, thereby determining the efficacy of the treatment.

=> e pathan ansar/au

E1 12 PATHAN A S/AU  
E2 9 PATHAN A Z/AU  
E3 3 --> PATHAN ANSAR/AU  
E4 16 PATHAN ANSAR A/AU  
E5 1 PATHAN ANSAR AHMED/AU  
E6 1 PATHAN ARIF/AU  
E7 1 PATHAN ASAD/AU  
E8 24 PATHAN B M/AU  
E9 1 PATHAN D I/AU  
E10 15 PATHAN E/AU  
E11 1 PATHAN E M/AU  
E12 1 PATHAN EJAZ/AU

=> s e3-e5 and tuberculosis

L4 16 ("PATHAN ANSAR"/AU OR "PATHAN ANSAR A"/AU OR "PATHAN ANSAR AHMED"/AU) AND TUBERCULOSIS

=> dup rem 14

PROCESSING COMPLETED FOR L4

L5 13 DUP REM L4 (3 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 13 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1088309 CAPLUS

TI Diagnosis of \*\*\*tuberculosis\*\*\* in South African children with a T-cell-based assay: a prospective cohort study

AU Liebeschuetz, Susan; Bamber, Sheila; Ewer, Katie; Deeks, Jonathan; \*\*\*Pathan, Ansar A.\*\*\* ; Lalvani, Ajit

CS Ngwelezana Hospital, kwa Zulu-Natal, S. Afr.

SO Lancet (2005), Volume Date 2004, 364(9452), 2196-2203

CODEN: LANCAO; ISSN: 0140-6736

PB Elsevier Ltd.

DT Journal

LA English

AB Background Childhood \*\*\*tuberculosis\*\*\* often presents non-specifically and is a common differential diagnosis in high prevalence areas. Current diagnostic tools have poor sensitivity and cannot reliably exclude \*\*\*tuberculosis\*\*\*, so overdiagnosis is common. HIV co-infection exacerbates this problem and accounts for an increasing proportion of paediatric \*\*\*tuberculosis\*\*\* worldwide. Methods We assessed the usefulness of a T-cell-based rapid blood test for Mycobacterium \*\*\*tuberculosis\*\*\* infection, the enzyme-linked immunospot assay (ELISPOT), in routine clin. practice. We did a

prospective blinded study of 293 African children with suspected \*\*\*tuberculosis\*\*\* in kwaZulu-Natal, a region with high HIV prevalence. Children had full clin. assessment, ELISPOT, and a tuberculin skin test. Test results were compared with final clin. and microbiol. diagnoses. Results In children with \*\*\*tuberculosis\*\*\*, sensitivity of ELISPOT was 83% (95% CI 75-89, n=133), significantly higher ( $p<0.001$ ) than the 63% (54-72) sensitivity of tuberculin skin test (n=116). Sensitivity of tuberculin skin test fell significantly in children younger than 3 years (to 51%), with HIV co-infection (36%), or with malnutrition (44%). Sensitivity of ELISPOT, which was not significantly adversely affected by these factors, was 85%, 73%, and 78%, resp. in these subgroups. In 116 children with both test results available, sensitivity of the two tests combined was 91% (85-95). Conclusions Diagnostic sensitivity of ELISPOT is higher than that of the skin test and is less affected by factors frequently assocd. with childhood \*\*\*tuberculosis\*\*\* in developing countries. Used together with the skin test, ELISPOT provides a clin. useful diagnostic sensitivity in African children with suspected \*\*\*tuberculosis\*\*\*.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 13 MEDLINE on STN  
AN 2004637267 IN-PROCESS  
DN PubMed ID: 15614710  
TI Ex vivo characterization of early secretory antigenic target 6-specific T cells at sites of active disease in pleural \*\*\*tuberculosis\*\*\*.  
AU Wilkinson Katalin A; Wilkinson Robert J; \*\*\*Pathan Ansar\*\*\* ; Ewer Katie; Prakash Manyu; Klenerman Paul; Maskell Nick; Davies Robert; Pasvol Geoffrey; Lalvani Ajit  
CS Nuffield Department of Medicine, University of Oxford, John Radcliffe Hospital, Oxford, United Kingdom.  
SO Clinical infectious diseases : an official publication of the Infectious Diseases Society of America, (2005 Jan 1) 40 (1) 184-7.  
Journal code: 9203213. ISSN: 1537-6591.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS IN-PROCESS; NONINDEXED; Priority Journals  
ED Entered STN: 20041223  
Last Updated on STN: 20041223  
AB Presence of early secretory antigenic target-6 (ESAT-6)-specific, interferon- gamma -secreting T cells in blood accurately marks \*\*\*tuberculosis\*\*\* infection. In tuberculous pleural effusions from 10 patients with \*\*\*tuberculosis\*\*\*, these cells were concentrated a mean of 15-fold (standard deviation, +/-6-fold), relative to their level in peripheral blood ( $P=.014$ ), and displayed rapid effector function. Such cells were absent in 8 control patients with nontuberculous pleural disease. The recruitment of ESAT-6-specific T cells to inflamed tuberculous tissue demonstrates their function in vivo and suggests a novel way to diagnose tuberculous pleuritis.

L5 ANSWER 3 OF 13 MEDLINE on STN  
AN 2005059742 IN-PROCESS  
DN PubMed ID: 15687027  
TI Boosting BCG with MVA85A: the first candidate subunit vaccine for \*\*\*tuberculosis\*\*\* in clinical trials.  
AU McShane Helen; \*\*\*Pathan Ansar A\*\*\* ; Sander Clare R; Goonetilleke Nilu

P; Fletcher Helen A; Hill Adrian V S  
CS Centre for Clinical Vaccinology and Tropical Medicine, University of Oxford, Churchill Hospital, Oxford OX3 7LJ, UK.  
SO Tuberculosis (Edinburgh, Scotland), (2005) 85 (1-2) 47-52.  
Journal code: 100971555. ISSN: 1472-9792.  
CY England: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals  
ED Entered STN: 20050203  
Last Updated on STN: 20050203  
AB There is an urgent need for an improved vaccine against \*\*\*tuberculosis\*\*\* . Heterologous prime-boost immunization regimes induce higher levels of cellular immunity than homologous boosting with the same vaccine. Using BCG as the priming immunization in such a regime allows for the retention of the beneficial protective effects of BCG against disseminated disease in childhood. Recombinant poxviruses are powerful boosting agents, for both CD4+ and CD8+ T cells. Here we review the preclinical data from a BCG prime-recombinant modified vaccinia virus Ankara expressing antigen 85A (MVA85A) boost strategy. MVA85A is now in clinical trials in the UK and Africa and the design of these trials, including the ethical and regulatory issues are discussed.

L5 ANSWER 4 OF 13 USPATFULL on STN  
AN 2004:184102 USPATFULL  
TI \*\*\*Tuberculosis\*\*\* vaccine  
IN Lalvani, Ajit, Oxford, UNITED KINGDOM  
      \*\*\*Pathan, Ansar A.\*\*\* , Oxford, UNITED KINGDOM  
PA ISIS INNOVATION LIMITED, Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2004141985 A1 20040722  
AI US 2003-721798 A1 20031126 (10)  
RLI Division of Ser. No. US 2001-916201, filed on 27 Jul 2001, ABANDONED  
Continuation-in-part of Ser. No. US 1999-467893, filed on 21 Dec 1999,  
ABANDONED  
PRAI US 1998-113783P 19981223 (60)  
DT Utility  
FS APPLICATION  
LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 1505  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of detecting an anti-mycobacterial CD8 T cell response comprising contacting a population of CD8 T cells of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO: 1 and/or 2, wherein one or more of said peptides may be substituted by an analogue which binds a T cell receptor which recognises the corresponding substituted peptide, and determining whether CD8 T cells of the CD8 T cell population recognize the peptide(s).

The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a CD8 T cell response, comprising administering (i) a CD8 T cell epitope of a mycobacterium

protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

L5 ANSWER 5 OF 13 MEDLINE on STN  
AN 2004635658 MEDLINE  
DN PubMed ID: 15610806  
TI Diagnosis of \*\*\*tuberculosis\*\*\* in South African children with a T-cell-based assay: a prospective cohort study.  
CM Comment in: Lancet. 2005 Jan 8;365(9454):97-8. PubMed ID: 15639273  
AU Liebeschuetz Susan; Bamber Sheila; Ewer Katie; Deeks Jonathan;  
\*\*\*Pathan\*\*\*  
\*\*\* Ansar A\*\*\* ; Lalvani Ajit  
CS Ngwelezana Hospital, Empangeni, kwaZulu-Natal, South Africa.  
SO Lancet, (2004 Dec 18) 364 (9452) 2196-203.  
Journal code: 2985213R. ISSN: 1474-547X.  
CY England: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Abridged Index Medicus Journals; Priority Journals  
EM 200501  
ED Entered STN: 20041222  
Last Updated on STN: 20050120  
Entered Medline: 20050119  
AB BACKGROUND: Childhood \*\*\*tuberculosis\*\*\* often presents non-specifically and is a common differential diagnosis in high prevalence areas. Current diagnostic tools have poor sensitivity and cannot reliably exclude \*\*\*tuberculosis\*\*\*, so overdiagnosis is common. HIV co-infection exacerbates this problem and accounts for an increasing proportion of paediatric \*\*\*tuberculosis\*\*\* worldwide. METHODS: We assessed the usefulness of a T-cell-based rapid blood test for Mycobacterium \*\*\*tuberculosis\*\*\* infection, the enzyme-linked immunospot assay (ELISPOT), in routine clinical practice. We did a prospective blinded study of 293 African children with suspected \*\*\*tuberculosis\*\*\* in kwaZulu-Natal, a region with high HIV prevalence. Children had full clinical assessment, ELISPOT, and a tuberculin skin test. Test results were compared with final clinical and microbiological diagnoses. RESULTS: In children with \*\*\*tuberculosis\*\*\*, sensitivity of ELISPOT was 83% (95% CI 75-89, n=133), significantly higher ( $p<0.001$ ) than the 63% (54-72) sensitivity of tuberculin skin test (n=116). Sensitivity of tuberculin skin test fell significantly in children younger than 3 years (to 51%), with HIV co-infection (36%), or with malnutrition (44%). Sensitivity of ELISPOT, which was not significantly adversely affected by these factors, was 85%, 73%, and 78%, respectively in these subgroups. In 116 children with both test results available, sensitivity of the two tests combined was 91% (85-95). CONCLUSIONS: Diagnostic sensitivity of ELISPOT is higher than that of the skin test and is less affected by factors frequently associated with childhood \*\*\*tuberculosis\*\*\* in developing countries. Used together with the skin test, ELISPOT provides a clinically useful diagnostic sensitivity in African children with suspected \*\*\*tuberculosis\*\*\* .

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
AN 2004:907345 CAPLUS

DN 141:393687  
TI Recombinant modified vaccinia virus Ankara expressing antigen 85A boosts BCG-primed and naturally acquired antimycobacterial immunity in humans  
AU McShane, Helen; \*\*\*Pathan, Ansar A.\*\*\* ; Sander, Clare R.; Keating, Sheila M.; Gilbert, Sarah C.; Huygen, Kris; Fletcher, Helen A.; Hill, Adrian V. S.  
CS Centre for Clinical Vaccinology and Tropical Medicine, Churchill Hospital, University of Oxford, University of Oxford, Oxford, OX3 7LJ, UK  
SO Nature Medicine (New York, NY, United States) (2004), 10(11), 1240-1244  
CODEN: NAMEFI; ISSN: 1078-8956  
PB Nature Publishing Group  
DT Journal  
LA English  
AB Protective immunity against *Mycobacterium \*\*\*tuberculosis\*\*\** depends on the generation of a TH1-type cellular immune response, characterized by the secretion of interferon-.gamma. (IFN-.gamma.) from antigen-specific T cells. The induction of potent cellular immune responses by vaccination in humans has proven difficult. Recombinant viral vectors, esp. poxviruses and adenoviruses, are particularly effective at boosting previously primed CD4+ and CD8+ T-cell responses against a no. of intracellular pathogens in animal studies. In the first phase 1 study of any candidate subunit vaccine against \*\*\*tuberculosis\*\*\*, recombinant modified vaccinia virus Ankara (MVA) expressing antigen 85A (MVA85A) was found to induce high levels of antigen-specific IFN-.gamma.-secreting T cells when used alone in bacille Calmette-Guerin (BCG)-naive healthy volunteers. In volunteers who had been vaccinated 0.5-38 years previously with BCG, substantially higher levels of antigen-specific IFN-.gamma.-secreting T cells were induced, and at 24 wk after vaccination these levels were 5-30 times greater than in vaccinees administered a single BCG vaccination. Boosting vaccinations with MVA85A could offer a practical and efficient strategy for enhancing and prolonging antimycobacterial immunity in \*\*\*tuberculosis\*\*\* -endemic areas.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 13 CAPIUS COPYRIGHT 2005 ACS on STN DUPLICATE 2  
AN 2003:994513 CAPIUS  
DN 140:58393  
TI CD8+ T cell-mediated suppression of intracellular *Mycobacterium \*\*\*tuberculosis\*\*\** growth in activated human macrophages  
AU Brookes, Roger H.; \*\*\*Pathan, Ansar A.\*\*\* ; McShane, Helen; Hensmann, Meike; Price, David A.; Hill, Adrian V. S.  
CS Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Oxford, UK  
SO European Journal of Immunology (2003), 33(12), 3293-3302  
CODEN: EJIMAF; ISSN: 0014-2980  
PB Wiley-VCH Verlag GmbH & Co. KGaA  
DT Journal  
LA English  
AB Animal models of \*\*\*tuberculosis\*\*\* point to a protective role for MHC class I-restricted CD8+ T cells, yet it is unclear how these cells protect or whether such findings extend to humans. Here the authors report that macrophages infected with *Mycobacterium \*\*\*tuberculosis\*\*\**, rapidly process and present an early secreted antigenic target (ESAT-6)-specific HLA class I-restricted CD8+ T cell epitope. When cocultured with CD8+ T cells restricted through classical HLA class I mol. the growth of bacilli within macrophages is significantly impaired after 7 days. This slow

antimycobacterial activity did not correlate with macrophage lysis but required cell contact. The authors also found that inhibitors of apoptosis either had no effect or augmented the CD8-mediated suppressive activity, suggesting that an activation signal might be involved. Indeed the authors show that CD8+ T cells were able to activate macrophages through receptors that include CD95 (Fas). Consistent with these findings the CD8-mediated suppression of mycobacterial growth was partially reversed by Fas blockade. These data identify a previously unrecognized CD8+ T cell-mediated mechanism used to control an intracellular infection of macrophages.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 13 CAPIUS COPYRIGHT 2005 ACS on STN DUPLICATE 3  
AN 2002:716868 CAPIUS  
DN 137:246533  
TI Mycobacterium \*\*\*tuberculosis\*\*\* epitopes in vaccines and detection of mycobacterial-specific cytotoxic T-cells  
IN Lalvani, Ajit; \*\*\*Pathan, Ansar A.\*\*\* ; Hill, Adrian V. S.  
PA UK  
SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 467,893, abandoned.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002131976	A1	20020919	US 2001-916201	20010727
	US 2004141985	A1	20040722	US 2003-721798	20031126
PRAI	US 1998-113783P	P	19981223		
	US 1999-467893	B2	19991221		
	US 2001-916201	B3	20010727		

AB A method of detecting an anti-mycobacterial CD8 T cell response comprising contacting a population of CD8 T cells of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO: 1 and/or 2, wherein one or more of said peptides may be substituted by an analog which binds a T cell receptor which recognizes the corresponding substituted peptide, and detg. whether CD8 T cells of the CD8 T cell population recognize the peptide(s). The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a CD8 T cell response, comprising administering (i) a CD8 T cell epitope of a mycobacterium protein, (ii) an analog of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii). The method of detecting CD8 T cells is an ELISPOT assay which detects interferon-.gamma., released by the T cells following peptide recognition, using an immobilized anti-IFN-.gamma. antibody.

L5 ANSWER 9 OF 13 MEDLINE on STN  
AN 2002724225 MEDLINE  
DN PubMed ID: 12441800  
TI Rapid detection of active and latent \*\*\*tuberculosis\*\*\* infection in HIV-positive individuals by enumeration of Mycobacterium

\*\*\*tuberculosis\*\*\* -specific T cells.

CM Comment in: AIDS. 2003 Aug 15;17(12):1859; author reply 1860-1. PubMed ID: 12891078

AU Chapman Ann L N; Munkanta Mwansa; Wilkinson Katalin A; \*\*\*Pathan Ansar\*\*\* \*\*\* A\*\*\* ; Ewer Katie; Ayles Helen; Reece William H; Mwinga Alwyn; Godfrey-Faussett Peter; Lalvani Ajit

CS Nuffield Department of Clinical Medicine, University of Oxford, John Radcliffe Hospital, Oxford, UK.

SO AIDS (London, England), (2002 Nov 22) 16 (17) 2285-93.

CY England: United Kingdom

DT (EVALUATION STUDIES)

Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; AIDS

EM 200301

ED Entered STN: 20021219  
Last Updated on STN: 20030202  
Entered Medline: 20030131

AB OBJECTIVES: An accurate test for *Mycobacterium* \*\*\*tuberculosis\*\*\* infection is urgently needed. The tuberculin skin test (TST) lacks sensitivity, particularly in HIV-infected individuals, and has poor specificity because of antigenic cross-reactivity with *Bacillus Calmette-Guerin* (BCG) vaccination. ESAT-6 and CFP-10 are antigens expressed in *Mycobacterium* \*\*\*tuberculosis\*\*\*, but not in *Mycobacterium bovis* BCG and most environmental mycobacteria. We investigated whether T cells specific for these antigens could serve as accurate markers of *M.* \*\*\*tuberculosis\*\*\* infection in an area of high \*\*\*tuberculosis\*\*\* and HIV prevalence. METHODS: Using the rapid ex-vivo enzyme-linked immunospot (ELISPOT) assay for IFN-gamma, we enumerated T cells specific for ESAT-6, CFP-10 and purified protein derivative (PPD) in blood samples from 50 Zambian \*\*\*tuberculosis\*\*\* patients, 75 healthy Zambian adults, and 40 healthy UK residents. TSTs were performed in 49 healthy Zambian adults. RESULTS: All (100%; n = 11) and 90% (n = 39) of HIV-negative and HIV-positive \*\*\*tuberculosis\*\*\* patients, respectively, had detectable ESAT-6- or CFP-10-specific T cells. The ESAT-6/CFP-10-based ELISPOT assay was positive in 37 out of 54 HIV-negative healthy Zambians, suggesting a 69% prevalence of latent *M.* \*\*\*tuberculosis\*\*\* infection. Fewer HIV-positive Zambians possessed ESAT-6/CFP-10-specific T cells, but the impact of HIV infection was less on this assay than on the PPD-based ELISPOT or TST. CONCLUSION: The ESAT-6/CFP-10-based ELISPOT assay detects active \*\*\*tuberculosis\*\*\* in HIV-positive individuals with high sensitivity. It is more specific, and possibly more sensitive, than PPD-based methods of detecting latent *M.* \*\*\*tuberculosis\*\*\* infection, and may potentially improve the targeting of isoniazid preventative therapy to HIV-positive individuals with latent \*\*\*tuberculosis\*\*\* infection.

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L5 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:801028 CAPLUS

DN 136:83812

TI Direct ex vivo analysis of antigen-specific IFN-.gamma.-secreting CD4 T cells in *Mycobacterium* \*\*\*tuberculosis\*\*\* -infected individuals: associations with clinical disease state and effect of treatment

AU \*\*\*Pathan, Ansar A.\*\*\* ; Wilkinson, Katalin A.; Klenerman, Paul;

McShane, Helen; Davidson, Robert N.; Pasvol, Geoffrey; Hill, Adrian V. S.;  
 Lalvani, Ajit  
 CS Nuffield Department of Clinical Medicine, John Radcliffe Hospital,  
 University of Oxford, Oxford, OX3 9DU, UK  
 SO Journal of Immunology (2001), 167(9), 5217-5225  
 CODEN: JOIMA3; ISSN: 0022-1767  
 PB American Association of Immunologists  
 DT Journal  
 LA English  
 AB The wide spectrum of clin. outcomes following infection with *Mycobacterium tuberculosis* is largely detd. by the host immune response; therefore, the authors studied several clin. defined groups of individuals that differ in their ability to contain the bacillus. To quantitate M. *tuberculosis*-specific T cells directly ex vivo, the authors enumerated IFN-.gamma.-secreting CD4 T cells specific for ESAT-6, a secreted Ag that is highly specific for M. *tuberculosis*, and a target of protective immune responses in animal models. The authors found that frequencies of circulating ESAT-6 peptide-specific IFN-.gamma.-secreting CD4 T cells were higher in latently infected healthy contacts and subjects with minimal disease and low bacterial burdens than in patients with culture-pos. active pulmonary *tuberculosis* (and, resp.). Importantly, the frequency of these Ag-specific CD4 T cells fell progressively in all groups with treatment, suggesting that the lower responses in patients with more extensive disease were not due to *tuberculosis*-induced immune suppression. This population of M. *tuberculosis* Ag-specific Th1-type CD4 T cells appears to correlate with clin. phenotype and declines during successful therapy; these features are consistent with a role for these T cells in the containment of M. *tuberculosis* in vivo. Such findings may assist in the design and evaluation of novel *tuberculosis* vaccine candidates.  
 RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2000:314729 CAPLUS  
 DN 132:320929  
 TI Test for diagnosis of *tuberculosis*  
 IN Lalvani, Ajit; Pathan, Ansar Ahmed\*\*\*  
 PA Isis Innovation Limited, UK  
 SO PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000026248	A2	20000511	WO 1999-GB3635	19991103
	WO 2000026248	A3	20011011		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 CA 2348475 AA 20000511 CA 1999-2348475 19991103  
 AU 9964809 A1 20000522 AU 1999-64809 19991103  
 BR 9915055 A 20010807 BR 1999-15055 19991103  
 EP 1144447 A2 20011017 EP 1999-952697 19991103  
 EP 1144447 A3 20020306  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 JP 2002532064 T2 20021002 JP 2000-579635 19991103  
 ZA 2001003356 A 20020124 ZA 2001-3356 20010425  
 PRAI GB 1998-24213 A 19981104  
 US 1998-107004P P 19981104  
 WO 1999-GB3635 W 19991103  
 AB The authors disclose a method of diagnosing infection or exposure to *Mycobacterium \*\*\*tuberculosis\*\*\**. The method is comprised of (1) contacting a population of T cells from the host with one or more peptides or peptide analogs derived from ESAT-6 and (2) detg. whether the T cells recognize the peptide(s) and/or analog(s) using ELISPOT.  
 L5 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2000:651305 CAPLUS  
 DN 133:320816  
 TI High frequencies of circulating IFN-.gamma.-secreting CD8 cytotoxic T cells specific for a novel MHC class I-restricted *Mycobacterium \*\*\*tuberculosis\*\*\** epitope in M. *\*\*\*tuberculosis\*\*\** -infected subjects without disease  
 AU \*\*\*Pathan, Ansar A.\*\*\* ; Wilkinson, Katalin A.; Wilkinson, Robert J.; Latif, Mohammed; McShane, Helen; Pasvol, Geoffrey; Hill, Adrian V. S.; Lalvani, Ajit  
 CS Institute of Molecular Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Oxford, UK  
 SO European Journal of Immunology (2000), 30(9), 2713-2721  
 CODEN: EJIMAF; ISSN: 0014-2980  
 PB Wiley-VCH Verlag GmbH  
 DT Journal  
 LA English  
 AB MHC class I-restricted CD8 cytotoxic T lymphocytes (CTL) are essential for protective immunity to *Mycobacterium \*\*\*tuberculosis\*\*\** in animal models but their role in humans remains unclear. The authors therefore studied subjects who had successfully contained M. *\*\*\*tuberculosis\*\*\** infection *in vivo*, i.e. exposed healthy household contacts and individuals with inactive self-healed pulmonary *\*\*\*tuberculosis\*\*\**. Using the ELISPOT assay for IFN-.gamma., the authors screened peptides from ESAT-6, a secreted antigen that is highly specific for M. *\*\*\*tuberculosis\*\*\**. The authors identified a novel nonamer epitope: unstimulated peripheral blood-derived CD8 T cells displayed peptide-specific IFN-.gamma. release *ex vivo* while CD8 T cell lines and clones exhibited HLA-A68.02-restricted cytolytic activity and recognized endogenously processed antigen. The frequency of CD8 CTL specific for this single M. *\*\*\*tuberculosis\*\*\** epitope, 1/2500 peripheral blood lymphocytes, was equiv. to the combined frequency of all IFN-.gamma.-secreting purified protein deriv.-reactive T cells *ex vivo*. This highly focused CTL response was maintained in an asymptomatic contact over 2 yr and is the most potent antigen-specific antimycobacterial CD8 CTL response hitherto described. Thus, human M. *\*\*\*tuberculosis\*\*\** -specific CD8 CTL are not necessarily assocd. with active disease per se. Rather, the authors' results are consistent with a protective role for these ESAT-6-specific CD8 T cells in the long-term

control of M. \*\*\*tuberculosis\*\*\* in vivo in humans.  
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:33912 CAPLUS  
DN 128:139656  
TI Human cytolytic and interferon .gamma.-secreting CD8+ T lymphocytes specific for *Mycobacterium* \*\*\*tuberculosis\*\*\*  
AU Lalvani, Ajit; Brookes, Roger; Wilkinson, Robert J.; Malin, Adam S.; \*\*\*Pathan, Ansar A.\*\*\* ; Andersen, Peter; Dockrell, Hazel; Pasvol, Geoffrey; Hill, Adrian V. S.  
CS Molecular Immunology Group, Institute of Molecular Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Oxford, OX3 9DU, UK  
SO Proceedings of the National Academy of Sciences of the United States of America (1998), 95(1), 270-275  
CODEN: PNASA6; ISSN: 0027-8424  
PB National Academy of Sciences  
DT Journal  
LA English  
AB Protective immunity to M. \*\*\*tuberculosis\*\*\* is poorly understood, but mounting evidence, at least in animal models, implicates major histocompatibility complex class I-restricted CD8+ T cells as an essential component. By using a highly sensitive assay for single cell interferon .gamma. release, the authors screened an array of M. \*\*\*tuberculosis\*\*\* antigen-derived peptides congruent with HLA class I allele-specific motifs. The authors identified CD8+ T cells specific for epitopes in the early secretory antigenic target 6 during active \*\*\*tuberculosis\*\*\*, after clin. recovery and in healthy contacts. Unrestimulated cells exhibited peptide-specific interferon .gamma. secretion, whereas lines or clones recognized endogenously processed antigen and showed cytolytic activity. These results provide direct evidence for the involvement of CD8+ cytotoxic T lymphocytes in host defense against M. \*\*\*tuberculosis\*\*\* in humans and support current attempts to generate protective cytotoxic T lymphocyte responses against M. \*\*\*tuberculosis\*\*\* by vaccination.  
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s tuberculosis and cd8?  
L6 5133 TUBERCULOSIS AND CD8?  
  
=> dup rem 16  
PROCESSING IS APPROXIMATELY 40% COMPLETE FOR L6  
PROCESSING IS APPROXIMATELY 84% COMPLETE FOR L6  
PROCESSING COMPLETED FOR L6  
L7 3569 DUP REM L6 (1564 DUPLICATES REMOVED)  
  
=> s 17 and (diagnos? or detect?)  
7 FILES SEARCHED...  
L8 2556 L7 AND (DIAGNOS? OR DETECT?)  
  
=> s 18 and assay? and (in vitro?)  
L9 2130 L8 AND ASSAY? AND (IN VITRO?)

=> s 19 and cytokine?  
L10 1972 L9 AND CYTOKINE?

=> s 110 and interferon?  
L11 1555 L10 AND INTERFERON?

=> s 111 and antibod?  
L12 1547 L11 AND ANTIBOD?

=> s 112 and peptide?  
L13 1493 L12 AND PEPTIDE?

=> s 113 and (cd8?/ti or cd8?/ab)  
'AB' IS NOT A VALID FIELD CODE  
'AB' IS NOT A VALID FIELD CODE  
'AB' IS NOT A VALID FIELD CODE  
L14 21 L13 AND (CD8?/TI OR CD8?/AB)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 21 ANSWERS - CONTINUE? Y/(N):y

L14 ANSWER 1 OF 21 USPATFULL on STN  
AN 2005:31676 USPATFULL  
TI Methods and materials relating to \*\*\*cd84\*\*\* -like polypeptides and polynucleotides  
IN Kuo, Chiaoyun, San Jose, CA, UNITED STATES  
Boyle, Bryan J., San Francisco, CA, UNITED STATES  
Wang, Jian-Rui, San Jose, CA, UNITED STATES  
Tang, Y. Tom, San Jose, CA, UNITED STATES  
Liu, Chenghua, San Jose, CA, UNITED STATES  
Drmanac, Radoje T., Palo Alto, CA, UNITED STATES  
PI US 2005027114 A1 20050203  
AI US 2003-311829 A1 20031003 (10)  
WO 2001-US2613 20010125  
RLI Continuation-in-part of Ser. No. US 2000-491404, filed on 25 Jan 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-645476, filed on 24 Aug 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-491404, filed on 25 Jan 2000, ABANDONED  
DT Utility  
FS APPLICATION  
LREP NUVELO, 675 ALMANOR AVE., SUNNYVALE, CA, 94085  
CLMN Number of Claims: 30  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 5461  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention provides novel polynucleotides and polypeptides encoded by such polynucleotides and mutants or variants thereof that correspond to a novel human secreted \*\*\*CD84\*\*\* -like polypeptide. These polynucleotides comprise nucleic acid sequences isolated from cDNA library from human spleen (Hyseq clone identification numbers 2938352 (SEQ ID NO: 1)). Other aspects of the invention include vectors containing processes for producing novel human secreted \*\*\*CD84\*\*\* -like polypeptides, and \*\*\*antibodies\*\*\* specific for such polypeptides.

L14 ANSWER 2 OF 21 USPATFULL on STN

AN 2004:306513 USPATFULL  
TI Methods of inducing a cytotoxic immune response and recombinant simian adenovirus compositions useful therein  
IN Ertl, Hildeghund C. J., Villanova, PA, UNITED STATES  
Wilson, James M., Gladwyne, PA, UNITED STATES  
PI US 2004241181 A1 20041202  
AI US 2003-480793 A1 20031219 (10)  
WO 2002-US15239 20020513  
PRAI US 2001-300131P 20010622 (60)  
US 2001-304843P 20010712 (60)  
DT Utility  
FS APPLICATION  
LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477  
CLMN Number of Claims: 18  
ECL Exemplary Claim: CLM-001-2  
DRWN 2 Drawing Page(s)  
LN.CNT 2227

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of inducing a \*\*\*CD8\*\*\* + T-cell response against a selected molecule by delivering the molecule via a recombinant simian adenovirus is provided. Also provided are methods of inducing \*\*\*interferon\*\*\* - .alpha. and \*\*\*interferon\*\*\* - .beta. by delivering a recombinant simian adenovirus to a subject. The methods of the invention are particularly well suited for prophylaxis and treatment of infections with human immunodeficiency virus and human papilloma virus, among others, and cancer therapy.

L14 ANSWER 3 OF 21 USPATFULL on STN  
AN 2004:273307 USPATFULL  
TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T cell immune response  
IN McMichael, Andrew, Beckley, UNITED KINGDOM  
Hill, Adrian V.S., Old Headington, UNITED KINGDOM  
Gilbert, Sarah C., Headington, UNITED KINGDOM  
Schneider, Jorg, Barton, UNITED KINGDOM  
Plebanski, Magdalena, Melbourne, AUSTRALIA  
Hanke, Tomas, Old Marston, UNITED KINGDOM  
Smith, Geoffrey L., Oxford, UNITED KINGDOM  
Blanchard, Tom, Banjul, GAMBIA  
PA Oxxon Pharmaccines Limited, Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2004213799 A1 20041028  
AI US 2003-686943 A1 20031016 (10)  
RLI Continuation of Ser. No. US 1999-454204, filed on 9 Dec 1999, GRANTED, Pat. No. US 6663871 Continuation of Ser. No. WO 1998-GB1681, filed on 9 Jun 1998, UNKNOWN  
PRAI GB 1997-11957 19970609  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 35  
ECL Exemplary Claim: 1  
DRWN 18 Drawing Page(s)  
LN.CNT 2589

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New methods and reagents for vaccination are described which generate a \*\*\*CD8\*\*\* T cell immune response against malarial and other antigens such as viral and tumour antigens. Novel vaccination regimes are described which employ a priming composition and a boosting composition, the boosting composition comprising a non-replicating or replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\* T cell epitope which is also present in the priming composition.

L14 ANSWER 4 OF 21 USPATFULL on STN

AN 2004:253824 USPATFULL

TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T cell immune response

IN McMichael, Andrew, Beckley, UNITED KINGDOM

Hill, Adrian V.S., Old Headington, UNITED KINGDOM

Gilbert, Sarah C., Headington, UNITED KINGDOM

Schneider, Jorg, Barton, UNITED KINGDOM

Plebanski, Magdalena, Melbourne, AUSTRALIA

Hanke, Tomas, Old Marston, UNITED KINGDOM

Smith, Geoffrey L., Oxford, UNITED KINGDOM

Blanchard, Tom, Banjul, GAMBIA

PA Oxxon Therapeutics Ltd. (non-U.S. corporation)

PI US 2004197349 A1 20041007

AI US 2004-833744 A1 20040428 (10)

RLI Continuation of Ser. No. US 2003-686943, filed on 16 Oct 2003, PENDING  
Continuation of Ser. No. US 1999-454204, filed on 9 Dec 1999, GRANTED,  
Pat. No. US 6663871 Continuation of Ser. No. WO 1998-GB1681, filed on 9  
Jun 1998, UNKNOWN Continuation of Ser. No. US 2003-653624, filed on 2  
Sep 2003, PENDING Division of Ser. No. US 1999-454204, filed on 9 Dec  
1999, GRANTED, Pat. No. US 6663871 Continuation of Ser. No. WO  
1998-GB1681, filed on 9 Jun 1998, UNKNOWN

PRAI GB 1997-11957 19970609

DT Utility

FS APPLICATION

LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)

LN.CNT 2566

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New methods and reagents for vaccination are described which generate a \*\*\*CD8\*\*\* T cell immune response against malarial and other antigens such as viral and tumour antigens. Novel vaccination regimes are described which employ a priming composition and a boosting composition, the boosting composition comprising a non-replicating or replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\* T cell epitope which is also present in the priming composition.

L14 ANSWER 5 OF 21 USPATFULL on STN

AN 2004:246678 USPATFULL

TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T cell immune response

IN McMichael, Andrew, Oxford, UNITED KINGDOM

Hill, Adrian V.S., Oxford, UNITED KINGDOM

Gilbert, Sarah C., Oxford, UNITED KINGDOM

Schneider, Jorg, Oxford, UNITED KINGDOM

Plebanski, Magdalena, Melbourne, AUSTRALIA

Hanke, Tomas, Oxford, UNITED KINGDOM  
Smith, Geoffrey L., Oxford, UNITED KINGDOM  
Blanchard, Tom, Banjul, GAMBIA

PA Oxxon Therapeutics Ltd. (non-U.S. corporation)  
PI US 2004191272 A1 20040930  
AI US 2004-833745 A1 20040428 (10)  
RLI Continuation of Ser. No. US 2003-686943, filed on 16 Oct 2003, PENDING  
Continuation of Ser. No. US 1999-454204, filed on 9 Dec 1999, GRANTED,  
Pat. No. US 6663871 Continuation of Ser. No. WO 1998-GB1681, filed on 9  
Jun 1998, UNKNOWN Continuation of Ser. No. US 2003-653624, filed on 2  
Sep 2003, PENDING Division of Ser. No. US 1999-454204, filed on 9 Dec  
1999, GRANTED, Pat. No. US 6663871 Continuation of Ser. No. WO  
1998-GB1681, filed on 9 Jun 1998, UNKNOWN

PRAI GB 1997-11957 19970609  
DT Utility  
FS APPLICATION

LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133

CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN 18 Drawing Page(s)  
LN.CNT 2553

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New methods and reagents for vaccination are described which generate a  
\*\*\*CD8\*\*\* T cell immune response against malarial and other antigens  
such as viral and tumour antigens. Novel vaccination regimes are  
described which employ a priming composition and a boosting composition,  
the boosting composition comprising a non-replicating or  
replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\*  
T cell epitope which is also present in the priming composition.

L14 ANSWER 6 OF 21 USPATFULL on STN  
AN 2004:226980 USPATFULL  
TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T  
cell immune response  
IN McMichael, Andrew, Beckley, UNITED KINGDOM  
Hill, Adrian V.S., Old Headington, UNITED KINGDOM  
Gilbert, Sarah C., Headington, UNITED KINGDOM  
Schneider, Jorg, Barton, UNITED KINGDOM  
Plebanski, Magdalena, Melbourne, AUSTRALIA  
Hanke, Tomas, Old Marston, UNITED KINGDOM  
Smith, Geoffrey L., Oxford, UNITED KINGDOM  
Blanchard, Tom, Banjul, GAMBIA

PA Oxxon Therapeutics Ltd. (non-U.S. corporation)  
PI US 2004175365 A1 20040909  
AI US 2004-833439 A1 20040428 (10)  
RLI Continuation of Ser. No. US 2003-686943, filed on 16 Oct 2003, PENDING  
Continuation of Ser. No. US 1999-454204, filed on 9 Dec 1999, GRANTED,  
Pat. No. US 6663871 Continuation of Ser. No. WO 1998-GB1681, filed on 9  
Jun 1998, UNKNOWN Continuation of Ser. No. US 2003-653624, filed on 2  
Sep 2003, PENDING Division of Ser. No. US 1999-454204, filed on 9 Dec  
1999, GRANTED, Pat. No. US 6663871 Continuation of Ser. No. WO  
1998-GB1681, filed on 9 Jun 1998, UNKNOWN

PRAI GB 1997-11957 19970609  
DT Utility  
FS APPLICATION

LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX

9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 18 Drawing Page(s)  
LN.CNT 2548

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New methods and reagents for vaccination are described which generate a \*\*\*CD8\*\*\* T cell immune response against malarial and other antigens such as viral and tumour antigens. Novel vaccination regimes are described which employ a priming composition and a boosting composition, the boosting composition comprising a non-replicating or replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\* T cell epitope which is also present in the priming composition.

L14 ANSWER 7 OF 21 USPATFULL on STN  
AN 2004:184102 USPATFULL  
TI \*\*\*Tuberculosis\*\*\* vaccine  
IN Lalvani, Ajit, Oxford, UNITED KINGDOM  
Pathan, Ansar A., Oxford, UNITED KINGDOM  
PA ISIS INNOVATION LIMITED, Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2004141985 A1 20040722  
AI US 2003-721798 A1 20031126 (10)  
RLI Division of Ser. No. US 2001-916201, filed on 27 Jul 2001, ABANDONED  
Continuation-in-part of Ser. No. US 1999-467893, filed on 21 Dec 1999,  
ABANDONED  
PRAI US 1998-113783P 19981223 (60)  
DT Utility  
FS APPLICATION  
LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 1505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of \*\*\*detecting\*\*\* an anti-mycobacterial \*\*\*CD8\*\*\* T cell response comprising contacting a population of \*\*\*CD8\*\*\* T cells of an individual with one or more \*\*\*peptides\*\*\* selected from the \*\*\*peptides\*\*\* represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further \*\*\*peptides\*\*\* represented by SEQ ID NO: 1 and/or 2, wherein one or more of said \*\*\*peptides\*\*\* may be substituted by an analogue which binds a T cell receptor which recognises the corresponding substituted \*\*\*peptide\*\*\*, and determining whether \*\*\*CD8\*\*\* T cells of the \*\*\*CD8\*\*\* T cell population recognize the \*\*\*peptide\*\*\* (s).

The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a \*\*\*CD8\*\*\* T cell response, comprising administering (i) a \*\*\*CD8\*\*\* T cell epitope of a mycobacterium protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

L14 ANSWER 8 OF 21 USPATFULL on STN  
AN 2004:171435 USPATFULL

TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T cell immune response  
IN McMichael, Andrew, Beckley, UNITED KINGDOM  
Hill, Adrian V.S., Old Headington, UNITED KINGDOM  
Gilbert, Sarah C., Headington, UNITED KINGDOM  
Schneider, Jorg, Barton, UNITED KINGDOM  
Plebanski, Magdalena, Melbourne, AUSTRALIA  
Hanke, Tomas, Old Marston, UNITED KINGDOM  
Smith, Geoffrey L., Oxford, UNITED KINGDOM  
Blanchard, Tom, Banjul, GAMBIA  
PI US 2004131594 A1 20040708  
AI US 2003-653624 A1 20030902 (10)  
RLI Division of Ser. No. US 1999-454204, filed on 9 Dec 1999, GRANTED, Pat. No. US 6663871 Continuation of Ser. No. WO 1998-GB1681, filed on 9 Jun 1998, UNKNOWN  
PRAI GB 1997-11957 19970609  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1  
DRWN 18 Drawing Page(s)  
LN.CNT 2510  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB New methods and reagents for vaccination are described which generate a \*\*\*CD8\*\*\* T cell immune response against malarial and other antigens such as viral and tumour antigens. Novel vaccination regimes are described which employ a priming composition and a boosting composition, the boosting composition comprising a non-replicating or replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\* T cell epitope which is also present in the priming composition.

L14 ANSWER 9 OF 21 USPATFULL on STN  
AN 2004:114006 USPATFULL  
TI Superior molecular vaccine linking the translocation domain of a bacterial toxin to an antigen  
IN Wu, Tzzy-Chou, Stevenson, MD, UNITED STATES  
Hung, Chien-Fu, Baltimore, MD, UNITED STATES  
PI US 2004086845 A1 20040506  
AI US 2002-115440 A1 20020404 (10)  
RLI Continuation-in-part of Ser. No. WO 2000-US41422, filed on 20 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-501097, filed on 9 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-421608, filed on 20 Oct 1999, ABANDONED

PRAI US 2001-281003P 20010404 (60)  
DT Utility  
FS APPLICATION  
LREP VENABLE, Post Office Box 34385, Washington, DC, 20043-9998  
CLMN Number of Claims: 85  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 3328  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids encoding a chimeric or fusion polypeptide which polypeptide comprises a first domain comprising a translocation polypeptide; and a second domain comprising at least one antigenic

\*\*\*peptide\*\*\* are disclosed. The preferred translocation polypeptide is a bacterial toxin translocation polypeptide, such as domain II of *Pseudomonas aeruginosa* exotoxin A (ETA(dII)). Such nucleic acids, expression vectors thereof, and cells expressing these vectors are used as vaccine compositions in a method for enhancing an antigen specific immune response, a method of increasing the numbers of \*\*\*CD8\*\*\* .sup.+ CTLs specific for a selected desired antigen in a subject, or a method of inhibiting the growth of a tumor in a subject.

L14 ANSWER 10 OF 21 USPATFULL on STN  
AN 2004:94219 USPATFULL  
TI Cell therapy method for the treatment of tumors  
IN Leturcq, Didier J., San Diego, CA, UNITED STATES  
Moriarty, Ann M., Poway, CA, UNITED STATES  
Jackson, Michael R., Del Mar, CA, UNITED STATES  
Peterson, Per A., Basking Ridge, NJ, UNITED STATES  
Richard, Jon M., Glenview, IL, UNITED STATES  
PI US 2004071671 A1 20040415  
AI US 2002-289566 A1 20021107 (10)  
RLI Continuation-in-part of Ser. No. US 2002-80013, filed on 19 Feb 2002,  
PENDING  
PRAI US 2001-270252P 20010220 (60)  
DT Utility  
FS APPLICATION  
LREP PHILIP S. JOHNSON, JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW  
BRUNSWICK, NJ, 08933-7003  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN 35 Drawing Page(s)  
LN.CNT 3072  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB T cell responses are often diminished in humans with a compromised immune system. We have developed a method to isolate, stimulate and expand naive cytotoxic T lymphocyte precursors (CTLp) to antigen-specific effectors, capable of lysing tumor cells *in vivo*. This *ex vivo* protocol produces fully functional effectors. Artificial antigen presenting cells (AAPCS; *Drosophila melanogaster*) transfected with human HLA class I and defined accessory molecules, are used to stimulate \*\*\*CD8\*\*\* .sup.+ T cells from both normal donors and cancer patients. The class I molecules expressed to a high density on the surface of the *Drosophila* cells are empty, allowing for efficient loading of multiple \*\*\*peptides\*\*\* that results in the generation of polyclonal responses recognizing tumor cells endogenously expressing the specific \*\*\*peptides\*\*\* . The responses generated are robust, antigen-specific and reproducible if the \*\*\*peptide\*\*\* epitope is a defined immunogen. This artificial antigen expression system can be adapted to treat most cancers in a significant majority of the population.

L14 ANSWER 11 OF 21 USPATFULL on STN  
AN 2004:21595 USPATFULL  
TI Lipopeptides containing an \*\*\*interferon\*\*\* -.gamma. fragment, and uses thereof in pharmaceutical compositions  
IN Thiam, Kader, Lille, FRANCE  
Auriault, Claude, Nomain, FRANCE  
Gras-Masse, Helene, Merignies, FRANCE  
Loing, Estelle, Lille, FRANCE  
Verwaerde, Claudie, Lille, FRANCE

Guillet, Jean Gerard, Vanves, FRANCE  
PA Institut National de la Sante et de la Recherche Medicale Inserm, Paris  
Cedex, FRANCE (non-U.S. corporation)  
Institut Pasteur de Lille, Lille, FRANCE (non-U.S. corporation)  
Centre National de la Recherche Scientifique, Paris Cedex, FRANCE  
(non-U.S. corporation)

PI US 6683052 B1 20040127  
WO 9940113 19990812

AI US 2000-601729 20001120 (9)  
WO 1999-FR259 19990205

PRAI FR 1998-1439 19980206

DT Utility

FS GRANTED

EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Kam, Chih-Min

LREP Young & Thompson

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 11 Drawing Page(s)

LN.CNT 3325

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns any lipopeptide characterized in that it comprises: a \*\*\*peptide\*\*\* part comprising the \*\*\*peptide\*\*\* sequence consisting of about 30 to about 50 of the last contiguous amino acids of the \*\*\*interferon\*\*\* -.gamma. (IFN-.gamma.) C-terminal end of mammals, whereof, if required, the last 3 to 20 amino acids have been suppressed; and one or several lipophilic parts comprising C4-C20 chain of carbon atoms, saturated or unsaturated, linear or branched, or a steroid group. The invention also concerns any lipopeptide such as defined above containing one or several \*\*\*CD8\*\*\*, and/or CD4, and/or B epitopes. The invention further concerns medicines or vaccines containing any polypeptide such as defined above.

L14 ANSWER 12 OF 21 USPATFULL on STN

AN 2003:326861 USPATFULL

TI Methods and reagents for vaccination which generate a \*\*\*CD8\*\*\* T cell immune response

IN McMichael, Andrew, Beckley, UNITED KINGDOM  
Hill, Adrian V. S., Old Headington, UNITED KINGDOM  
Gilbert, Sarah C., Headington, UNITED KINGDOM  
Schneider, Jorg, Barton, UNITED KINGDOM  
Plebanski, Magdalena, Melbourne, AUSTRALIA  
Hanke, Tomas, Old Marston, UNITED KINGDOM  
Smith, Geoffrey L., Oxford, UNITED KINGDOM  
Blanchard, Tom, Banjul, SOUTH AFRICA

PA Oxxon Pharmaccines Ltd., Oxford, UNITED KINGDOM (non-U.S. corporation)

PI US 6663871 B1 20031216

AI US 1999-454204 19991209 (9)

RLI Continuation of Ser. No. WO 1998-GB1681, filed on 9 Jun 1998

PRAI GB 1997-11957 19970609

DT Utility

FS GRANTED

EXNAM Primary Examiner: Housel, James; Assistant Examiner: Foley, Shanon

LREP Hamilton, Brook, Smith & Reynolds, P.C.

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN 33 Drawing Figure(s); 13 Drawing Page(s)

LN.CNT 2605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New methods and reagents for vaccination are described which generate a \*\*\*CD8\*\*\* T cell immune response against malarial and other antigens such as viral and tumour antigens. Novel vaccination regimes are described which employ a priming composition and a boosting composition, the boosting composition comprising a non-replicating or replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\* T cell epitope which is also present in the priming composition.

L14 ANSWER 13 OF 21 USPATFULL on STN

AN 2003:264840 USPATFULL

TI Use of recombinant hepatitis B core particles to develop vaccines against infectious pathogens and malignancies

IN Zavala, Fidel, New York, NY, UNITED STATES  
Birkett, Ashley J., Escondido, CA, UNITED STATES

PI US 2003185854 A1 20031002

AI US 2003-360836 A1 20030207 (10)

PRAI US 2002-354963P 20020208 (60)

DT Utility

FS APPLICATION

LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257

CLMN Number of Claims: 60

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 2518

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for augmenting \*\*\*CD8\*\*\* + T cell responses to an antigen in a mammal, comprising the use of recombinant hepatitis B core particles (rHEP) to present said antigen. The invention further relates to a method of boosting the rHEP particle-induced \*\*\*CD8\*\*\* + T cell responses using secondary immunization with a recombinant vaccinia virus expressing the same antigen (rVAC). The methods and compositions of the present invention can be useful for prophylaxis and treatment of various infectious and neoplastic diseases.

L14 ANSWER 14 OF 21 USPATFULL on STN

AN 2003:243803 USPATFULL

TI Ex-vivo priming for generating cytotoxic T lymphocytes specific for non-tumor antigens to treat autoimmune and allergic disease

IN Cai, Zeling, San Diego, CA, UNITED STATES  
Jackson, Michael R., Del Mar, CA, UNITED STATES  
Peterson, Per A., Basking Ridge, NJ, UNITED STATES  
Shi, Wei-Xing, San Diego, CA, UNITED STATES  
Kong, Yan, Belle Mead, NJ, UNITED STATES  
DeGraw, Juli, San Diego, CA, UNITED STATES

PI US 2003170212 A1 20030911

AI US 2002-144188 A1 20020513 (10)

PRAI US 2001-291300P 20010515 (60)

DT Utility

FS APPLICATION

LREP Janet E. Reed, Esq., WOODCOCK WASHBURN LLP, 46th Floor, One Liberty Place, Philadelphia, PA, 19103

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 26 Drawing Page(s)

LN.CNT 1997

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cytotoxic T lymphocytes (CTLs) specific for antigenic \*\*\*peptides\*\*\* derived from IgE molecule can be generated in \*\*\*vitro\*\*\* by stimulating resting naive \*\*\*CD8\*\*\* T cells with IgE \*\*\*peptides\*\*\* presented by artificial antigen presenting cells. The IgE specific CTLs lyse the target cells loaded with IgE \*\*\*peptides\*\*\* in \*\*\*vitro\*\*\* and inhibit antigen specific IgE response in vivo. In addition, adoptive transfer of the IgE specific CTL to an asthmatic mouse model can inhibit the development of lung inflammation and airway hypersensitivity. IgE specific CTL provides a treatment for allergic asthma and other IgE-mediated allergic diseases. Antigenic \*\*\*peptides\*\*\* identified from non-tumor self-antigens induce specific cytotoxic T lymphocyte (CTL) in \*\*\*vitro\*\*\*. The CTL induced by \*\*\*peptides\*\*\* identified from CD40L can kill activated CD4 T cells. In \*\*\*vitro\*\*\* generated CTL specific for CD40L inhibit CD4-dependent \*\*\*antibody\*\*\* responses of all isotypes in vivo. In contrast, CTL induced by antigenic \*\*\*peptides\*\*\* derived from IgE specifically inhibit IgE responses, and adoptive transfer of CD40L-specific CTL to NOD mice at early age delay the development of diabetes in NOD mice. In \*\*\*vitro\*\*\* generated CTL specific for non-tumor self-antigens expressed on activated CD4 T cells regulate immune responses in vivo.

L14 ANSWER 15 OF 21 USPATFULL on STN

AN 2003:225324 USPATFULL

TI Use of glycosylceramides as adjuvants for vaccines against infections and cancer

IN Tsuji, Moriya, New York, NY, UNITED STATES

Gonzalez-Aseguinolaza, Gloria, Navarra, SPAIN

Koezuka, Yasuhiko, Gunma, JAPAN

PA NEW YORK UNIVERSITY (U.S. corporation)

PI US 2003157135 A1 20030821

AI US 2002-206155 A1 20020725 (10)

PRAI US 2001-308056P 20010725 (60)

DT Utility

FS APPLICATION

LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257

CLMN Number of Claims: 64

ECL Exemplary Claim: 1

DRWN 12 Drawing Page(s)

LN.CNT 2684

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for augmenting an immunogenicity of an antigen in a mammal, comprising administering said antigen together with an adjuvant composition that includes glycosylceramide, preferably .alpha.-galactosylceramide (.alpha.-GalCer). According to the present invention, the use of glycosylceramide as an adjuvant is attributed at least in part to the enhancement and/or extension of antigen-specific Th1-type responses, in particular, \*\*\*CD8\*\*\* + T cell responses. The methods and compositions of the present invention can be useful for prophylaxis and treatment of various infectious and neoplastic diseases.

L14 ANSWER 16 OF 21 USPATFULL on STN

AN 2003:158936 USPATFULL

TI Methods and compositions for modulating interleukin-21 receptor activity  
IN Carter, Laura, Medford, MA, UNITED STATES  
Carreno, Beatriz, Acton, MA, UNITED STATES  
Lowe, Leslie D., Sudbury, MA, UNITED STATES  
Whitters, Matthew J., Hudson, MA, UNITED STATES  
Dunussi, Kyri, Belmont, MA, UNITED STATES  
Collins, Mary, Natick, MA, UNITED STATES  
Ma, Margery, Roxbury, MA, UNITED STATES  
Young, Deborah A., Melrose, MA, UNITED STATES  
Witek, JoAnn S., Acton, MA, UNITED STATES  
Larsen, Glenn, Sudbury, MA, UNITED STATES  
Kasaian, Marion T., Charlestown, MA, UNITED STATES  
Donaldson, Debra D., Medford, MA, UNITED STATES  
Unger, Michelle, Chapel Hill, NC, UNITED STATES  
PA Wyeth, Madison, NJ (U.S. corporation)  
PI US 2003108549 A1 20030612  
AI US 2002-264634 A1 20021004 (10)  
RLI Continuation-in-part of Ser. No. US 2001-972218, filed on 4 Oct 2001,  
PENDING Continuation-in-part of Ser. No. US 2000-569384, filed on 11 May  
2000, PENDING Continuation-in-part of Ser. No. US 2000-560766, filed on  
28 Apr 2000, ABANDONED Continuation of Ser. No. US 1998-40005, filed on  
17 Mar 1998, GRANTED, Pat. No. US 6057128  
PRAI US 2002-373746P 20020417 (60)  
DT Utility  
FS APPLICATION  
LREP WYETH, PATENT LAW GROUP, FIVE GIRALDA FARMS, MADISON, NJ, 07940  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1  
DRWN 47 Drawing Page(s)  
LN.CNT 4944  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods and compositions for modulating interleukin-21 (IL-21)/IL-21  
receptor (MU-1) activity using agonists or antagonists of IL-21 or IL-21  
receptor ("IL-21R" or "MU-1"), are disclosed. IL-21/IL-21R antagonists  
can be used to induce immune suppression in vivo, e.g., for treating or  
preventing immune cell-associated pathologies (e.g., pathologies  
associated with aberrant activity of one or more of mature T cells  
(mature \*\*\*CD8\*\*\* +, mature CD4+ T cells), mature NK cells, B cells,  
macrophages and megakaryocytes, including transplant rejection and  
autoimmune disorders). IL-21/IL-21R agonists can be used by themselves  
or in combination with an antigen, e.g., as an adjuvant (e.g., a vaccine  
adjuvant), to up-regulate an immune response in vivo, e.g., for example,  
for use in treating cancer and infectious disorders.  
L14 ANSWER 17 OF 21 USPATFULL on STN  
AN 2003:152969 USPATFULL  
TI Screening methods  
IN Jakobsen, Bent Karsten, Wantage, UNITED KINGDOM  
PA AVIDEX LIMITED, Milton, UNITED KINGDOM (non-U.S. corporation)  
PI US 2003104635 A1 20030605  
AI US 2002-188444 A1 20020702 (10)  
RLI Continuation-in-part of Ser. No. US 2002-103597, filed on 21 Mar 2002,  
PENDING Continuation of Ser. No. WO 2000-GB3579, filed on 18 Sep 2000,  
UNKNOWN  
PRAI GB 1999-22352 19990921  
DT Utility  
FS APPLICATION

LREP HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 2609

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for sequentially screening for compounds with the potential to interfere with low affinity receptor-ligand contacts using an interfacial optical \*\*\*assay\*\*\*, such as surface plasmon resonance (SPR). The method comprises contacting a candidate compound with an immobilized receptor, contacting the receptor, which may or may not have the candidate compound bound to it, with the ligand and \*\*\*detecting\*\*\* by interfacial optical \*\*\*assay\*\*\* whether or not the ligand or ligand-compound complex has bound to the receptor or receptor-compound complex. If the ligand binds, the method shows that the compound does not inhibit the receptor-ligand interaction. If the ligand does not bind, the method shows that the compound inhibits the receptor-ligand interaction. The method is particularly useful for screening for inhibitors of the interaction between MHC/ \*\*\*peptide\*\*\* complex and T cell receptor, MHC/ \*\*\*peptide\*\*\* complex and \*\*\*CD8\*\*\* coreceptor or MHC/ \*\*\*peptide\*\*\* complex and CD4 coreceptor.

L14 ANSWER 18 OF 21 USPATFULL on STN

AN 2003:140591 USPATFULL  
TI Screening methods  
IN Jakobsen, Bent Karsten, Wantage, UNITED KINGDOM  
PA AVIDEX LIMITED, Milton, UNITED KINGDOM, OX 14 4RX  
PI US 2003096432 A1 20030522  
AI US 2002-103597 A1 20020321 (10)  
RLI Continuation of Ser. No. WO 2000-GB3579, filed on 18 Sep 2000, UNKNOWN  
PRAI GB 1999-22352 19990921  
DT Utility  
FS APPLICATION  
LREP HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 2234

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for sequentially screening for compounds with the potential to interfere with low affinity receptor-ligand contacts using an interfacial optical \*\*\*assay\*\*\*, such as surface plasmon resonance (SPR). The method comprises contacting a candidate compound with an immobilised receptor, contacting the receptor, which may or may not have the candidate compound bound to it, with the ligand and \*\*\*detecting\*\*\* by interfacial optical \*\*\*assay\*\*\* whether or not the ligand or ligand-compound complex has bound to the receptor or receptor-compound complex. If the ligand binds, the method shows that the compound does not inhibit the receptor-ligand interaction. If the ligand does not bind, the method shows that the compound inhibits the receptor-ligand interaction. The method is particularly usefull for screening for inhibitors of the interaction between MHC/ \*\*\*peptide\*\*\* complex and T cell receptor, MHC/ \*\*\*peptide\*\*\* complex and \*\*\*CD8\*\*\* coreceptor or MHC/ \*\*\*peptide\*\*\* complex and CD4 coreceptor.

L14 ANSWER 19 OF 21 USPATFULL on STN  
AN 2003:120162 USPATFULL  
TI Human monoclonal \*\*\*antibodies\*\*\* to FC alpha receptor ( \*\*\*CD89\*\*\*  
)  
IN Hudson, Debra, Livermore, CA, UNITED STATES  
van Dijk, Marcus A., Bilthoven, NETHERLANDS  
van de Winkel, Jan G.J., Zeist, NETHERLANDS  
PI US 2003082643 A1 20030501  
AI US 2002-73644 A1 20020211 (10)  
PRAI US 2001-338956P 20011105 (60)  
US 2001-268075P 20010212 (60)  
DT Utility  
FS APPLICATION  
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109  
CLMN Number of Claims: 51  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 3363

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Human monoclonal \*\*\*antibodies\*\*\* which bind specifically to Fc alpha receptor ( \*\*\*CD89\*\*\* ), including monoclonal \*\*\*antibodies\*\*\* which react specifically to Fc receptor for IgA of human effector cells are disclosed. The binding agents, e.g., \*\*\*antibodies\*\*\* are useful for targeting human effector cells (e.g. macrophages) against a target cell (e.g. a cancer cell, an infectious agent, etc.). For this purpose, bifunctional \*\*\*antibodies\*\*\* or heteroantibodies can be constructed containing the binding region derived from an anti-Fc-alpha receptor \*\*\*antibody\*\*\* and the binding region of a target-specific \*\*\*antibody\*\*\* . Targeted effector cells can specifically lyse target cells.

L14 ANSWER 20 OF 21 USPATFULL on STN  
AN 2003:112518 USPATFULL  
TI Cell therapy method for the treatment of tumors  
IN Moriarty, Ann, Poway, CA, UNITED STATES  
Leturqc, Didier J., San Diego, CA, UNITED STATES  
Degraw, Juli, San Diego, CA, UNITED STATES  
Jackson, Michael R., Del Mar, CA, UNITED STATES  
Peterson, Per A., Basking Ridge, NJ, UNITED STATES  
Heiskala, Marja, San Diego, CA, UNITED STATES  
PI US 2003077248 A1 20030424  
AI US 2002-80013 A1 20020219 (10)  
PRAI US 2001-270252P 20010220 (60)  
DT Utility  
FS APPLICATION  
LREP Philip S. Johnson, Esq., Johnson & Johnson, One Johnson & Johnson Plaza,  
New Brunswick, NJ, 08933-7003  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN 29 Drawing Page(s)  
LN.CNT 1964

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB T cell responses are often diminished in humans with a compromised immune system. We have developed a method to isolate, stimulate and expand naive cytotoxic T lymphocyte precursors (CTLp) to antigen-specific effectors, capable of lysing tumor cells in vivo. This ex vivo protocol produces fully functional effectors. Artificial antigen

presenting cells (AAPCs; *Drosophila melanogaster*) transfected with human HLA class I and defined accessory molecules, are used to stimulate \*\*\*CD8\*\*\* .sup.+ T cells from both normal donors and cancer patients. The class I molecules expressed to a high density on the surface of the *Drosophila* cells are empty, allowing for efficient loading of multiple \*\*\*peptides\*\*\* that results in the generation of polyclonal responses recognizing tumor cells endogenously expressing the specific \*\*\*peptides\*\*\* . The responses generated are robust, antigen-specific and reproducible if the \*\*\*peptide\*\*\* epitope is a defined immunogen. This artificial antigen expression system can be adapted to treat most cancers in a significant majority of the population.

L14 ANSWER 21 OF 21 USPATFULL on STN  
AN 2003:57064 USPATFULL  
TI Activation and protection of T-cells (CD4+ and \*\*\*CD8\*\*\* +) using an H2 receptor agonist and other T-cell activating agents  
IN Hellstrand, Kristoffer, Goteborg, SWEDEN  
Hermansson, Svante, Molndal, SWEDEN  
Gehlsen, Kurt R., Encinitas, CA, UNITED STATES  
PI US 2003039628 A1 20030227  
AI US 2002-265521 A1 20021003 (10)  
RLI Continuation of Ser. No. US 1998-139281, filed on 24 Aug 1998, ABANDONED  
DT Utility  
FS APPLICATION  
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR,  
IRVINE, CA, 92614  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Page(s)  
LN.CNT 1607  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to a method for facilitating activation of T-cells in a patient, comprising: identifying a patient in need of enhanced T-cell activity, administering an effective amount of a T-cell activating composition to the patient, and administering an effective amount of a compound that inhibits the production or release of intercellular reactive oxygen metabolites (ROM) to the patient. The present invention further relates to the use of H.sub.2-receptor agonists to augment the effectiveness of vaccines.

=> s 113 and (tuberculosis/ti or tuberculosis/ab)  
'AB' IS NOT A VALID FIELD CODE  
'AB' IS NOT A VALID FIELD CODE  
'AB' IS NOT A VALID FIELD CODE  
L15 28 L13 AND (TUBERCULOSIS/TI OR TUBERCULOSIS/AB)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 28 ANSWERS - CONTINUE? Y/(N):y

L15 ANSWER 1 OF 28 USPATFULL on STN  
AN 2004:313952 USPATFULL  
TI Methods and compounds for the treatment of immunologically-mediated diseases using *Mycobacterium vaccae*  
IN Watson, James D., St. Helliers, NEW ZEALAND  
Tan, Paul L.J., Howick, AUSTRALIA  
Prestidge, Ross L., Grey Lynn, NEW ZEALAND

PA      Abernethy, Nevin, Meadowbank, NEW ZEALAND  
PA      GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, Auckland, NEW  
ZEALAND (non-U.S. corporation)  
PI      US 2004247622      A1      20041209  
AI      US 2004-825709      A1      20040416 (10)  
RLI      Continuation-in-part of Ser. No. US 2000-710425, filed on 8 Nov 2000,  
GRANTED, Pat. No. US 6723327 Continuation-in-part of Ser. No. US  
1999-449013, filed on 24 Nov 1999, GRANTED, Pat. No. US 6350457  
PRAI     US 1999-137112P      19990602 (60)  
DT      Utility  
FS      APPLICATION  
LREP     SPECKMAN LAW GROUP PLLC, 1501 WESTERN AVE, SEATTLE, WA, 98101  
CLMN     Number of Claims: 22  
ECL      Exemplary Claim: 1  
DRWN     12 Drawing Page(s)  
LN.CNT 1916  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB      Methods for the prevention and treatment of disorders, including  
disorders of the skin and respiratory system, such as infection with  
mycobacteria such as M. \*\*\*tuberculosis\*\*\* or M. avium, sarcoidosis,  
asthma, allergic rhinitis, allergic dermatitis and lung cancers are  
provided, such methods comprising administering a composition comprising  
at least one derivative of delipidated and deglycolipidated M. vaccae  
cells.

L15     ANSWER 2 OF 28 USPATFULL on STN  
AN      2004:196851 USPATFULL  
TI      Regulation of human b7-h2 protein  
IN      Encinas, Jeffrey, Kyoto-shi, Kyoto-fu, JAPAN  
        Tanabe, Eri, Nara-shi Nara-ken, JAPAN  
        Watanabe, Shinichi, Nara-shi Nara-ken, JAPAN  
PI      US 2004152156      A1      20040805  
AI      US 2004-250533      A1      20040409 (10)  
        WO 2002-EP28                            20020104  
DT      Utility  
FS      APPLICATION  
LREP     JEFFREY M. GREENMAN, BAYER PHARMACEUTICALS CORPORATION, 400 MORGAN LANE,  
WEST HAVEN, CT, 06516  
CLMN     Number of Claims: 51  
ECL      Exemplary Claim: 1  
DRWN     22 Drawing Page(s)  
LN.CNT 2605  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB      Reagents which regulate human B7-H2 and reagents which bind to human  
B7-H2 gene products can play a role in preventing, ameliorating, or  
correcting dysfunctions or diseases including, but not limited to,  
allergic diseases, such as respiratory allergies, food allergies,  
asthma, and atopic dermatitis, as well as in the treatment of  
intracellular bacterial infections, such as \*\*\*tuberculosis\*\*\*,  
leprosy, listeriosis, and salmonellosis; and autoimmune diseases, such  
as multiple sclerosis, rheumatoid arthritis, and type I diabetes, as  
well as in the treatment of helminth and extracellular microbial  
infections.

L15     ANSWER 3 OF 28 USPATFULL on STN  
AN      2004:184102 USPATFULL  
TI      \*\*\*Tuberculosis\*\*\* vaccine

IN Lalvani, Ajit, Oxford, UNITED KINGDOM  
Pathan, Ansar A., Oxford, UNITED KINGDOM  
PA ISIS INNOVATION LIMITED, Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2004141985 A1 20040722  
AI US 2003-721798 A1 20031126 (10)  
RLI Division of Ser. No. US 2001-916201, filed on 27 Jul 2001, ABANDONED  
Continuation-in-part of Ser. No. US 1999-467893, filed on 21 Dec 1999,  
ABANDONED  
PRAI US 1998-113783P 19981223 (60)  
DT Utility  
FS APPLICATION  
LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 1505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of \*\*\*detecting\*\*\* an anti-mycobacterial \*\*\*CD8\*\*\* T cell response comprising contacting a population of \*\*\*CD8\*\*\* T cells of an individual with one or more \*\*\*peptides\*\*\* selected from the \*\*\*peptides\*\*\* represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further \*\*\*peptides\*\*\* represented by SEQ ID NO: 1 and/or 2, wherein one or more of said \*\*\*peptides\*\*\* may be substituted by an analogue which binds a T cell receptor which recognises the corresponding substituted \*\*\*peptide\*\*\*, and determining whether \*\*\*CD8\*\*\* T cells of the \*\*\*CD8\*\*\* T cell population recognize the \*\*\*peptide\*\*\* (s).

The invention also provides a method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a \*\*\*CD8\*\*\* T cell response, comprising administering (i) a \*\*\*CD8\*\*\* T cell epitope of a mycobacterium protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

L15 ANSWER 4 OF 28 USPATFULL on STN  
AN 2004:144604 USPATFULL  
TI Protection against mycobacterial infections  
IN Vipond, Richard, Wiltshire, UNITED KINGDOM  
Shuttleworth, Helen, Salisbury Wiltshire, UNITED KINGDOM  
Ambrose, Emma, Alberta, CANADA  
Minton, Nigel Peter, Wiltshire, UNITED KINGDOM  
PI US 2004110269 A1 20040610  
AI US 2004-432934 A1 20040210 (10)  
WO 2001-GB5250 20011128  
PRAI GB 2000-28966 20001128  
DT Utility  
FS APPLICATION  
LREP Sterne Kessler, Goldstein & Fox, Suite 600, 1100 New York Avenue NW,  
Washington, DC, 20005-3934  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 5805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method of identifying mycobacterial genes which were induced or up-regulated during *M. tuberculosis* virulence, and to isolated \*\*\*peptide\*\*\* products of said genes. Also provided, are inhibitors of said genes, and \*\*\*antibodies\*\*\* which bind to said \*\*\*peptide\*\*\* products. Further embodiments include DNA and RNA vectors encoding said products, attenuated mycobacteria in which the activity of at least one of said genes or \*\*\*peptide\*\*\* products has been modified, vaccines against mycobacterial infections, and methods of \*\*\*detecting\*\*\* a mycobacterial infection.

L15 ANSWER 5 OF 28 USPATFULL on STN

AN 2004:113684 USPATFULL

TI Fusion proteins of mycobacterium \*\*\*tuberculosis\*\*\*

IN Skeiky, Yasir, Seattle, WA, UNITED STATES

Reed, Steven, Bellevue, WA, UNITED STATES

Alderson, Mark, Bainbridge Island, WA, UNITED STATES

PI US 2004086523 A1 20040506

AI US 2001-886349 A1 20010620 (9)

RLI Continuation-in-part of Ser. No. US 2000-597796, filed on 20 Jun 2000, PENDING

PRAI US 2001-265737P 20010201 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 88

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 5261

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and fusion proteins containing at least two *Mycobacterium* sp. antigens, and nucleic acids encoding such compositions and fusion proteins. The compositions of the invention increase serological sensitivity of sera from individuals infected with \*\*\*tuberculosis\*\*\*, and methods for their use in the \*\*\*diagnosis\*\*\*, treatment, and prevention of \*\*\*tuberculosis\*\*\* infection.

L15 ANSWER 6 OF 28 USPATFULL on STN

AN 2004:97263 USPATFULL

TI Methods and compounds for the treatment of immunologically-mediated diseases using mycobacterium vaccae

IN Watson, James D., Auckland, NEW ZEALAND

Tan, Paul L. J., Auckland, NEW ZEALAND

Prestidge, Ross, Auckland, NEW ZEALAND

Abernethy, Nevin, Auckland, NEW ZEALAND

PA Genesis Research and Development Corporation, Parnell, NEW ZEALAND (non-U.S. corporation)

PI US 6723327 B1 20040420

AI US 2000-710425 20001108 (9)

RLI Continuation-in-part of Ser. No. US 1999-449013, filed on 24 Nov 1999, now patented, Pat. No. US 6350457

PRAI WO 2000-NZ85 20000601

US 1999-137112P 19990602 (60)

DT Utility

FS GRANTED  
EXNAM Primary Examiner: Swartz, Rodney P  
LREP Speckman, Ann W., Sleath, Janet  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 22 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 1672

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the prevention and treatment of disorders, including disorders of the skin and respiratory system, such as infection with mycobacteria such as M. \*\*\*tuberculosis\*\*\* or M. avium, sarcoidosis, asthma, allergic rhinitis, allergic dermatitis and lung cancers are provided, such methods comprising administering a composition comprising at least one derivative of delipidated and deglycolipidated M. vaccae cells.

L15 ANSWER 7 OF 28 USPATFULL on STN  
AN 2004:85235 USPATFULL  
TI Noninvasive genetic immunization, expression products therefrom, and uses thereof  
IN Tang, De-chu C., Birmingham, AL, United States  
Marks, Donald H., Rockaway, NJ, United States  
Curiel, David T., Birmingham, AL, United States  
Shi, Zhongkai, Birmingham, AL, United States  
PA The UAB Research Foundation, Birmingham, AL, United States (U.S. corporation)  
PI US 6716823 B1 20040406  
AI US 2000-533149 20000323 (9)  
RLI Continuation-in-part of Ser. No. US 402527  
PRAI US 1999-132216P 19990503 (60)  
US 1998-75113P 19980211 (60)  
US 1997-55520P 19970813 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Crouch, Deborah; Assistant Examiner: Woitach, Joseph  
LREP Frommer Lawrence & Haug, LLP, Frommer, William S., Kowalski, Thomas J.  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)  
LN.CNT 2355

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed and claimed are methods of non-invasive genetic immunization in an animal and/or methods of inducing a systemic immune or therapeutic response in an animal, products therefrom and uses for the methods and products therefrom. The methods can include contacting skin of the animal with a vector in an amount effective to induce the systemic immune or therapeutic response in the animal. The vector can include and express an exogenous nucleic acid molecule encoding an epitope or gene product of interest. The systemic immune response can be to or from the epitope or gene product. The nucleic acid molecule can encode an epitope of interest and/or an antigen of interest and/or a nucleic acid molecule that stimulates and/or modulates an immunological response and/or stimulates and/or modulates expression, e.g., transcription and/or translation, such as transcription and/or translation of an endogenous and/or exogenous nucleic acid molecule; e.g., one or more of influenza hemagglutinin, influenza nuclear protein, influenza M2, tetanus toxin C-fragment, anthrax protective antigen, anthrax lethal factor, rabies

glycoprotein, HBV surface antigen, HIV gp 120, HIV gp 160, human carcinoembryonic antigen, malaria CSP, malaria SSP, malaria MSP, malaria pfg, and mycobacterium \*\*\*tuberculosis\*\*\* HSP; and/or a therapeutic, an immunomodulatory gene, such as co-stimulatory gene and/or a

\*\*\*cytokine\*\*\* gene. The immune response can be induced by the vector expressing the nucleic acid molecule in the animal's cells. The animal's cells can be epidermal cells. The immune response can be against a pathogen or a neoplasm. A prophylactic vaccine or a therapeutic vaccine or an immunological composition can include the vector. The animal can be a vertebrate, e.g., a mammal, such as human, a cow, a horse, a dog, a cat, a goat, a sheep or a pig; or fowl such as turkey, chicken or duck. The vector can be one or more of a viral vector, including viral coat, e.g., with some or all viral genes deleted therefrom, bacterial, protozoan, transposon, retrotransposon, and DNA vector, e.g., a recombinant vector; for instance, an adenovirus, such as an adenovirus defective in its E1 and/or E3 and/or E4 region(s). The method can encompass applying a delivery device including the vector to the skin of the animal, as well as such a method further including disposing the vector in and/or on the delivery device. The vector can have all viral genes deleted therefrom. The vector can induce a therapeutic and/or an anti-tumor effect in the animal, e.g., by expressing an oncogene, a tumor-suppressor gene, or a tumor-associated gene. Immunological products generated by the expression, e.g., \*\*\*antibodies\*\*\*, cells from the methods, and the expression products, are likewise useful in in

\*\*\*vitro\*\*\* and ex vivo applications, and such immunological and expression products and cells and applications are disclosed and claimed. Methods for expressing a gene product in vivo and products therefor and therefrom including mucosal and/or intranasal administration of an adenovirus, advantageously an E1 and/or E3 and/or E4 defective or deleted adenovirus, such as a human adenovirus or canine adenovirus, are also disclosed and claimed.

L15 ANSWER 8 OF 28 USPATFULL on STN

AN 2004:76186 USPATFULL

TI Therapeutic TB vaccine

IN Andersen, Peter, Bronshoj, DENMARK

Rosenkrands, Ida, Vaerlose, DENMARK

Stryhn, Anette, Virum, DENMARK

PI US 2004057963 A1 20040325

AI US 2003-617038 A1 20030711 (10)

PRAI DK 2002-1098 20020713

US 2002-401725P. 20020807 (60)

DT Utility

FS APPLICATION

LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 6018

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Therapeutic vaccines comprising polypeptides expressed during the latent stage of mycobacteria infection are provided, as are multiphase vaccines, and methods for treating and preventing \*\*\*tuberculosis\*\*\*

L15 ANSWER 9 OF 28 USPATFULL on STN

AN 2004:13414 USPATFULL  
TI Vaccine and drug delivery by topical application of vectors and vector extracts  
IN Tang, De-chu C., Birmingham, AL, UNITED STATES  
Shi, Zhongkai, Birmingham, AL, UNITED STATES  
van Kampen, Kent Rigby, Hoover, AL, UNITED STATES  
PI US 2004009936 A1 20040115  
AI US 2003-346021 A1 20030116 (10)  
RLI Continuation-in-part of Ser. No. US 2002-116963, filed on 5 Apr 2002,  
PENDING Continuation-in-part of Ser. No. US 2002-52323, filed on 18 Jan  
2002, PENDING Continuation-in-part of Ser. No. US 2000-563826, filed on  
3 May 2000, GRANTED, Pat. No. US 6348450 Continuation-in-part of Ser.  
No. US 2000-533149, filed on 23 Mar 2000, PENDING Continuation-in-part  
of Ser. No. US 2000-402527, filed on 3 Jan 2000, PENDING  
PRAI US 1999-132216P 19990503 (60)  
DT Utility  
FS APPLICATION  
LREP FROMMER LAWRENCE & HAUG, 745 FIFTH AVENUE- 10TH FL., NEW YORK, NY, 10151  
CLMN Number of Claims: 92  
ECL Exemplary Claim: 1  
DRWN 27 Drawing Page(s)  
LN.CNT 2913

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed and claimed are methods of non-invasive immunization and drug delivery in an animal and/or methods of inducing a systemic immune or therapeutic response in an animal following topical application of non-replicative vectors, products therefrom and uses for the methods and products therefrom. Also disclosed and claimed are methods of non-invasive immunization and drug delivery in an animal and/or a method of inducing a systemic immune response or systemic therapeutic response to a gene product comprising contacting skin of the animal with cell-free extracts in an amount effective to induce the response, wherein the extracts are prepared by filtration of disrupted cells, wherein the cell comprises and expresses a nucleic acid molecule. Preferably, the cell is temporarily disrupted by sonication, remaining intact and viable after the sonication. Also, methods are disclosed and claimed for enhancing the immunogenicity and efficacy of an epicutaneous vaccine for inducing a systemic immune response to an antigen, in an animal comprising contacting skin of the animal with vaccines admixed with heat-shock protein 27, in an amount effective to induce the response. The methods include contacting skin of the animal with a vector in an amount effective to induce the systemic immune or therapeutic response. The vector can include and express an exogenous nucleic acid molecule encoding an epitope or gene product of interest. The systemic immune response can be to or from the epitope or gene product. The nucleic acid molecule can encode an epitope or antigen of interest and/or a nucleic acid molecule that stimulates and/or modulates an immunological response and/or stimulates and/or modulates expression, e.g., transcription and/or translation, such as transcription and/or translation of an endogenous and/or exogenous nucleic acid molecule; e.g., one or more of influenza hemagglutinin, influenza nuclear protein, influenza M2, tetanus toxin C-fragment, anthrax protective antigen, anthrax lethal factor, anthrax germination factors, rabies glycoprotein, HBV surface antigen, HIV gp120, HIV gp160, human carcinoembryonic antigen, malaria CSP, malaria SSP, malaria MSP, malaria pfg, botulinum toxin A, and mycobacterium \*\*\*tuberculosis\*\*\* HSP; and/or a therapeutic, an immunomodulatory gene, such as co- stimulatory gene

and/or a \*\*\*cytokine\*\*\* gene. The immune response can be induced by the vector expressing the nucleic acid molecule in the animal's cells including epidermal cells. The immune response can also be induced by antigens expressed from the nucleic acid molecule within the vector. The immune response can be against a pathogen or a neoplasm. A prophylactic vaccine or a therapeutic vaccine or an immunological composition can include the vector. The animal can be a vertebrate, e.g., a mammal, such as human, a cow, a horse, a dog, a cat, a goat, a sheep or a pig; or fowl such as turkey, chicken or duck. The vector can be one or more of a viral vector, including viral coat, e.g., with some or all viral genes deleted therefrom, bacterial, protozoan, transposon, retrotransposon, and DNA vector, e.g., a recombinant vector; for instance, an adenovirus, such as an adenovirus defective in its E1 and/or E3 and/or E4 region(s) and/or all adenoviral genes.

L15 ANSWER 10 OF 28 USPATFULL on STN  
AN 2003:334717 USPATFULL  
TI Fusion proteins of Mycobacterium \*\*\*tuberculosis\*\*\*  
IN Skeiky, Yasir, Bellevue, WA, UNITED STATES  
Guderian, Jeff, Lynwood, WA, UNITED STATES  
Reed, Steven, Bellevue, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)  
PI US 2003235593 A1 20031225  
AI US 2003-369983 A1 20030218 (10)  
PRAI US 2002-357351P 20020215 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834  
CLMN Number of Claims: 85  
ECL Exemplary Claim: 1  
DRWN 43 Drawing Page(s)  
LN.CNT 2856  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to compositions and fusion proteins containing at least two Mycobacterium sp. antigens, and nucleic acids encoding such compositions and fusion proteins. The compositions of the invention increase serological sensitivity of sera from individuals infected with \*\*\*tuberculosis\*\*\*, and methods for their use in the \*\*\*diagnosis\*\*\*, treatment, and prevention of \*\*\*tuberculosis\*\*\* infection.

L15 ANSWER 11 OF 28 USPATFULL on STN  
AN 2003:282669 USPATFULL  
TI Compositions and methods for treatment of infectious and inflammatory diseases  
IN Ho, John L., New York, NY, UNITED STATES  
PI US 2003199012 A1 20031023  
AI US 2003-357043 A1 20030131 (10)  
PRAI US 2002-353985P 20020201 (60)  
DT Utility  
FS APPLICATION  
LREP Michael L. Goldman, Esq., NIXON & PEABODY LLP, Clinton Square, P.O. Box 31051, Rochester, NY, 14603-1051  
CLMN Number of Claims: 46  
ECL Exemplary Claim: 1  
DRWN 22 Drawing Page(s)

LN.CNT 2138

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a nucleic acid construct having a nucleic acid molecule that encodes a factor suppressing an immune response to *Mycobacterium \*\*\*tuberculosis\*\*\** in a host subject; an isolated \*\*\*antibody\*\*\* against the protein or polypeptide encoded by the nucleic acid molecule; and uses for the protein and its \*\*\*antibody\*\*\*, including in a method for \*\*\*detection\*\*\* of *Mycobacterium \*\*\*tuberculosis\*\*\** in a sample of tissue or body fluids; a method of vaccinating a mammal against infection by *Mycobacterium \*\*\*tuberculosis\*\*\**; a vaccine for preventing infection and disease of mammals by *Mycobacterium \*\*\*tuberculosis\*\*\** and for actively immunizing mammals against *Mycobacterium \*\*\*tuberculosis\*\*\**; and methods of treating inflammatory disease in mammals.

L15 ANSWER 12 OF 28 USPATFULL on STN

AN 2003:148763 USPATFULL

TI *Mycobacterium \*\*\*tuberculosis\*\*\** DNA sequences encoding immunostimulatory \*\*\*peptides\*\*\* and methods for using same

IN Nano, Francis E., Victoria, CANADA

PA University of Victoria Innovation and Development Corporation, Victoria, CANADA (non-U.S. corporation)

PI US 6572865 B1 20030603

AI US 2000-477135 20000103 (9)

RLI Continuation-in-part of Ser. No. US 1997-990823, filed on 15 Dec 1997, now patented, Pat. No. US 6228371, issued on 8 May 2001 Continuation of Ser. No. WO 1996-US10375, filed on 14 Jun 1996

PRAI US 1995-254P 19950615 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Swartz, Rodney P

LREP Klarquist Sparkman, LLP

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 4304

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleotide sequences isolated from *Mycobacterium \*\*\*tuberculosis\*\*\** are disclosed. These sequences encode immunostimulatory \*\*\*peptides\*\*\*. Also disclosed are vaccine preparations formulated using these \*\*\*peptides\*\*\*.

L15 ANSWER 13 OF 28 USPATFULL on STN

AN 2003:70984 USPATFULL

TI *Mycobacterium \*\*\*tuberculosis\*\*\** DNA sequences encoding immunostimulatory \*\*\*peptides\*\*\* and methods for using same

IN Nano, Francis E., Victoria, CANADA

PA University of Victoria Innovation and Development Corporation (non-U.S. corporation)

PI US 2003049269 A1 20030313

AI US 2001-997181 A1 20011128 (9)

RLI Division of Ser. No. US 2000-477135, filed on 3 Jan 2000, PENDING Continuation-in-part of Ser. No. US 1997-990823, filed on 15 Dec 1997, GRANTED, Pat. No. US 6228371 Continuation-in-part of Ser. No. WO 1996-US10375, filed on 14 Jun 1996, UNKNOWN

PRAI US 1995-254P 19950615 (60)

DT Utility

FS APPLICATION  
LREP KLARQUIST SPARKMAN, LLP, Suite 1600, One World Trade Center, Portland, OR, 97204  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 4351  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Nucleotide sequences isolated from Mycobacterium \*\*\*tuberculosis\*\*\* are disclosed. These sequences encode immunostimulatory \*\*\*peptides\*\*\*. Also disclosed are vaccine preparations formulated using these \*\*\*peptides\*\*\*.

L15 ANSWER 14 OF 28 USPATFULL on STN  
AN 2003:70978 USPATFULL  
TI Mycobacterium \*\*\*tuberculosis\*\*\* DNA sequences encoding immunostimulatory \*\*\*peptides\*\*\* and methods for using same  
IN Nano, Francis E., Victoria, CANADA  
PA University of Victoria Innovation and Development Corporation (non-U.S. corporation)  
PI US 2003049263 A1 20030313  
AI US 2001-997182 A1 20011128 (9)  
RLI Division of Ser. No. US 2000-477135, filed on 3 Jan 2000, PENDING  
Continuation-in-part of Ser. No. US 1997-990823, filed on 15 Dec 1997, PATENTED Continuation-in-part of Ser. No. WO 1996-US10375, filed on 14 Jun 1996, UNKNOWN

PRAI US 1995-254P 19950615 (60)  
DT Utility  
FS APPLICATION  
LREP Klarquist Sparkman, LLP, One World Trade Center, Suite 1600, 121 SW Salmon Street, Portland, OR, 97204  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 4317

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Nucleotide sequences isolated from Mycobacterium \*\*\*tuberculosis\*\*\* are disclosed. These sequences encode immunostimulatory \*\*\*peptides\*\*\*. Also disclosed are vaccine préparations formulated using these \*\*\*peptides\*\*\*.

L15 ANSWER 15 OF 28 USPATFULL on STN  
AN 2003:40415 USPATFULL  
TI Methods for inducing interleukin-12 and a type1/Th1 T-cell response  
IN Modlin, Robert L., Sherman Oaks, CA, United States  
Libraty, Daniel H., Bangkok, THAILAND  
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)  
PI US 6517839 B1 20030211  
AI US 1998-118426 19980717 (9)  
PRAI US 1997-52970P 19970718 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Nolan, Patrick J.; Assistant Examiner: Ewoldt, Gerald R.  
LREP Mandel & Adriano  
CLMN Number of Claims: 2

ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 1318

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for inducing interleukin-12 production and inducing a type 1/Th1 T cell response in a subject, thereby stimulating cell-mediated immunity for prevention or treatment of pathogen infections or treatment of a \*\*\*interferon\*\*\* (-sensitive tumor, are provided. Compounds effective in the above-described methods include a lipopeptide having an N-terminal ester- or amide-linked fatty acyl group and are administered in an amount effective to induce interleukin-12 and to induce the type 1/Th1 T-cell response. Preferably, the subject is a human patient, and the lipopeptide is an N-terminal moiety of a 19 kDa or a 38 kDa lipoprotein of *Mycobacterium* \*\*\*tuberculosis\*\*\* .

L15 ANSWER 16 OF 28 USPATFULL on STN

AN 2002:343542 USPATFULL

TI Methods and compounds for the treatment of immunologically - mediated diseases of the respiratory system using *mycobacterium* vaccae

IN Watson, James D., Auckland, NEW ZEALAND  
Tan, Paul L.J., Auckland, NEW ZEALAND

PI US 2002197265 A1 20021226

AI US 2002-51643 A1 20020118 (10)

RLI Continuation of Ser. No. US 1998-156181, filed on 17 Sep 1998, PENDING  
Continuation-in-part of Ser. No. US 1997-996624, filed on 23 Dec 1997,  
ABANDONED

DT Utility

FS APPLICATION

LREP Janet Sleath, SPECKMAN LAW GROUP, Suite 100, 1501 Western Avenue,  
Seattle, WA, 98101

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 6136

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the prevention and treatment by immunotherapy of lung immune disorders, including infection with mycobacteria such as *M.* \*\*\*tuberculosis\*\*\* or *M. avium*, sarcoidosis, asthma, allergic rhinitis

and lung cancers are provided, such methods comprising administering a composition having antigenic and/or adjuvant properties. Compositions which may be usefully employed in the inventive methods include inactivated *M. vaccae* cells, delipidated and deglycolipidated *M. vaccae* cells, *M. vaccae* culture filtrate and compounds present in or derived therefrom, together with combinations of such components.

L15 ANSWER 17 OF 28 USPATFULL on STN

AN 2002:336874 USPATFULL

TI MHC class I associated \*\*\*peptides\*\*\* for prevention and treatment of \*\*\*tuberculosis\*\*\*

IN Flyer, David, Olney, MD, UNITED STATES

Ross, Mark M., Charlottesville, VA, UNITED STATES

Hunt, Donald F., Charlottesville, VA, UNITED STATES

White, Forest M., Charlottesville, VA, UNITED STATES

Engelhard, Victor H., Charlottesville, VA, UNITED STATES

Philip, Ramila, Charlottesville, VA, UNITED STATES

PI US 2002192229 A1 20021219

AI US 2001-22286 A1 20011213 (10)  
PRAI US 2001-264978P 20010130 (60)  
US 2000-255292P 20001213 (60)  
DT Utility  
FS APPLICATION  
LREP CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,, STEWART & OLSTEIN, 6 Becker  
Farm Road, Roseland, NJ, 07068  
CLMN Number of Claims: 32  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the prevention, treatment, and \*\*\*diagnosis\*\*\* of \*\*\*tuberculosis\*\*\*, and discloses \*\*\*peptides\*\*\*, polypeptides, and polynucleotides that can be used to stimulate a CTL response against \*\*\*tuberculosis\*\*\*. The \*\*\*peptide\*\*\* and/or proteins of the invention may be used as a therapeutic drug to stimulate the immune system to recognize and eliminate M. \*\*\*tuberculosis\*\*\* in infected cells or as a vaccine for the prevention of disease. \*\*\*Antibodies\*\*\* that react with the immunogens of the invention, as well as methods of using these \*\*\*antibodies\*\*\* for prevention and treatment of disease, are also disclosed.

L15 ANSWER 18 OF 28 USPATFULL on STN  
AN 2002:307565 USPATFULL  
TI Mycobacterium \*\*\*tuberculosis\*\*\* DNA sequences encoding immunostimulatory \*\*\*peptides\*\*\* and methods for using same  
IN Nano, Francis E., Victoria, CANADA  
PA University of Victoria Innovation and Development Corporation (non-U.S. corporation)  
PI US 2002172684 A1 20021121  
AI US 2001-996634 A1 20011128 (9)  
RLI Division of Ser. No. US 2000-477135, filed on 3 Jan 2000, PENDING  
Continuation-in-part of Ser. No. US 1997-990823, filed on 15 Dec 1997,  
PATENTED Continuation-in-part of Ser. No. WO 1996-US10375, filed on 14 Jun 1996, UNKNOWN  
PRAI US 1995-254P 19950615 (60)  
DT Utility  
FS APPLICATION  
LREP KLARQUIST SPARKMAN, LLP, One World Trade Center, Suite 1600, 121 S.W.  
Salmon Street, Portland, OR, 97204  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 4329

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleotide sequences isolated from Mycobacterium \*\*\*tuberculosis\*\*\* are disclosed. These sequences encode immunostimulatory \*\*\*peptides\*\*\*. Also disclosed are vaccine preparations formulated using these \*\*\*peptides\*\*\*.

L15 ANSWER 19 OF 28 USPATFULL on STN  
AN 2002:202126 USPATFULL  
TI Composition comprising a carrier and a purified mycobacterial lipid cell-wall component and its use in the prevention, treatment and \*\*\*diagnosis\*\*\* of disease

IN Verschoor, Jan Adrianus, Pretoria, SOUTH AFRICA

Lenaerts, Anne, Genk, BELGIUM

Johannsen, Elzbieta, Pretoria, SOUTH AFRICA

PA Adcock Ingram Limited, Bryanston, SOUTH AFRICA (non-U.S. corporation)

PI US 6433013 B1 20020813

AI US 1999-388725 19990902 (9)

RLI Continuation-in-part of Ser. No. WO 1998-GB681, filed on 13 Mar 1998

PRAI ZA 1997-1817 19970303

ZA 1997-10300 19971114

DT Utility

FS GRANTED

EXNAM Primary Examiner: Weddington, Kevin E.

LREP Ladas & Parry

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 41 Drawing Figure(s); 41 Drawing Page(s)

LN.CNT 4997

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A composition comprising a purified lipid cell-wall component or analog or derivative thereof and a suitable pharmaceutical carrier, medium, excipient or adjuvant is described. The composition is useful in prophylactic and therapeutic methods of treating a microbial infection in a subject, typically a mycobacterial infection such as

\*\*\*tuberculosis\*\*\*, and immune disorders, inflammatory conditions and allergies in a subject, typically autoimmune diseases. It is also useful in \*\*\*diagnostic\*\*\* methods. The purified lipid cell-wall component is typically a purified mycolic acid or a mixture of purified mycolic acids from a bacterium which produces mycolic acids. The bacterium is from *Mycobacterium*, *Corynebacterium*, *Nocardia* or *Rhodococcus*.

L15 ANSWER 20 OF 28 USPATFULL on STN

AN 2002:185292 USPATFULL

TI Compounds and methods for \*\*\*diagnosis\*\*\* and immunotherapy of \*\*\*tuberculosis\*\*\*

IN Campos-Neto, Antonio, Bainbridge Island, WA, UNITED STATES

Skeiky, Yasir, Seattle, WA, UNITED STATES

Ovendale, Pamela, Everett, WA, UNITED STATES

Jen, Shyian, Seattle, WA, UNITED STATES

Lodes, Michael, Seattle, WA, UNITED STATES

PI US 2002098200 A1 20020725

AI US 2001-793306 A1 20010226 (9)

PRAI US 2000-223828P 20000808 (60)

US 2000-185037P 20000225 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 51

ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)

LN.CNT 6182

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds and methods for \*\*\*diagnosing\*\*\* \*\*\*tuberculosis\*\*\* or for inducing protective immunity against \*\*\*tuberculosis\*\*\* are disclosed. The compounds provided include polypeptides that contain at least one immunogenic portion of one or more *Mycobacterium* proteins and DNA molecules encoding such polypeptides. \*\*\*Diagnostic\*\*\* kits

containing such polypeptides or DNA sequences and a suitable \*\*\*detection\*\*\* reagent may be used for the \*\*\*detection\*\*\* of Mycobacterium infection in patients and biological samples. \*\*\*Antibodies\*\*\* directed against such polypeptides are also provided.

In addition, such compounds may be formulated into vaccines and/or pharmaceutical compositions for immunization against Mycobacterium infection.

L15 ANSWER 21 OF 28 USPATFULL on STN  
AN 2002:157689 USPATFULL  
TI Composition comprising a carrier and a purified mycobacterial lipid cell-wall component and its use in the prevention, treatment and \*\*\*diagnosis\*\*\* of disease  
IN Verschoor, Jan Adrianus, The Willows, SOUTH AFRICA  
Lenaerts, Anne, Genk, BELGIUM  
Johannsen, Elzbieta, Lynwood Glen, SOUTH AFRICA  
PA ADCOCK INGRAM LIMITED (non-U.S. corporation)  
PI US 2002082297 A1 20020627  
AI US 2001-847365 A1 20010502 (9)  
RLI Division of Ser. No. US 1999-388725, filed on 2 Sep 1999, UNKNOWN  
PRAI ZA 1997-1817 19970303  
ZA 1997-10300 19971114  
DT Utility  
FS APPLICATION  
LREP Ladas & Parry, 26 West 61st Street, New York, NY, 10023  
CLMN Number of Claims: 58  
ECL Exemplary Claim: 1  
DRWN 38 Drawing Page(s)  
LN.CNT 5454

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A composition including a purified lipid cell-wall component or analog or derivative thereof and a suitable pharmaceutical carrier, medium, excipient or adjuvant is described. The composition is useful in prophylactic and therapeutic methods of treating a microbial infection in a subject, typically a mycobacterial infection such as \*\*\*tuberculosis\*\*\*, and immune disorders, inflammatory conditions and allergies in a subject, typically autoimmune diseases. It is also useful in \*\*\*diagnostic\*\*\* methods. The purified lipid cell-wall component is typically a purified mycolic acid or a mixture of purified mycolic acids from a bacterium which produces mycolic acids. The bacterium is from Mycobacterium, Corynbacterium, Nocardia or Rhodococcus.

L15 ANSWER 22 OF 28 USPATFULL on STN  
AN 2002:157688 USPATFULL  
TI A METHOD FOR TREATING AN IMMUNE DISORDER WITH A PURIFIED MYCOBACTERIAL MYCOLIC ACID  
IN Verschoor, Jan Adrianus, Pretoria, SOUTH AFRICA  
Lenaerts, Anne, Genk, BELGIUM  
Johannsen, Elzbieta, Pretoria, SOUTH AFRICA  
PA ADCOCK INGRAM LIMITED (non-U.S. corporation)  
PI US 2002082296 A1 20020627  
AI US 2001-847364 A1 20010502 (9)  
RLI Division of Ser. No. US 1999-388725, filed on 2 Sep 1999, UNKNOWN  
PRAI ZA 1997-1817 19970303  
ZA 1997-10300 19971114  
DT Utility

FS APPLICATION

LREP Ladas & Parry, 26 West 61st Street, New York, NY, 10023

CLMN Number of Claims: 58

ECL Exemplary Claim: 1

DRWN 38 Drawing Page(s)

LN.CNT 5456

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A composition including a purified lipid cell-wall component or analog or derivative thereof and a suitable pharmaceutical carrier, medium, excipient or adjuvant is described. The composition is useful in prophylactic and therapeutic methods of treating a microbial infection in a subject, typically a mycobacterial infection such as

\*\*\*tuberculosis\*\*\*, and immune disorders, inflammatory conditions and allergies in a subject, typically autoimmune disease. It also useful in \*\*\*diagnostic\*\*\* methods. The purified lipid cell-wall component is typically a purified mycolic acid or a mixture of purified mycolic acids from a bacterium which produces mycolic acids. The bacterium is from Mycobacterium, Corynebacterium, Nocardia or Rhodococcus.

L15 ANSWER 23 OF 28 USPATFULL on STN

AN 2002:99511 USPATFULL

TI Composition comprising a carrier and a purified mycobacterial lipid cell-wall component and its use in the prevention, treatment and \*\*\*diagnosis\*\*\* of disease

IN Verschoor, Jan Adrianus, Pretoria, SOUTH AFRICA

Lenaerts, Anne, Genk, BELGIUM

Johannsen, Elzbieta, Pretoria, SOUTH AFRICA

PA ADCOCK INGRAM LIMITED (non-U.S. corporation)

PI US 2002052412 A1 20020502

AI US 2001-847514 A1 20010502 (9)

RLI Division of Ser. No. US 1999-388725, filed on 2 Sep 1999, PENDING  
Continuation-in-part of Ser. No. WO 1998-GB681, filed on 3 Mar 1998,  
UNKNOWN

PRAI ZA 1997-1817 19970303

ZA 1997-10300 19971114

DT Utility

FS APPLICATION

LREP Clifford J. Mass, c/o Ladas & Parry, 26 West 61st Street, New York, NY, 10023

CLMN Number of Claims: 58

ECL Exemplary Claim: 1

DRWN 38 Drawing Page(s)

LN.CNT 5085

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A composition including a purified lipid cell-wall component or analog or derivative thereof and a suitable pharmaceutical carrier, medium, excipient or adjuvant is described. The composition is useful in prophylactic and therapeutic methods of treating a microbial infection in a subject, typically a mycobacterial infection such as

\*\*\*tuberculosis\*\*\*, and immune disorders, inflammatory conditions and allergies in a subject, typically autoimmune disease. It is also useful in \*\*\*diagnostic\*\*\* methods. The purified lipid cell-wall component is typically a purified mycolic acid or a mixture of purified mycolic acids from a bacterium which produces mycolic acids. The bacterium is from Mycobacterium, Corynebacterium, Nocardia or Rhodococcus.

L15 ANSWER 24 OF 28 USPATFULL on STN

AN 2002:84912 USPATFULL  
TI Isolated and purified nonpeptide antigens from mycobacterium  
    \*\*\*tuberculosis\*\*\*  
IN Liu, Gui, Medford, MA, UNITED STATES  
    Beltz, Gerald, Lexington, MA, UNITED STATES  
    LeClair, Kenneth, Needham, MA, UNITED STATES  
    Cox, Daniel, Medway, MA, UNITED STATES  
    Kensil, Charlotte, Milford, MA, UNITED STATES  
PI US 2002044951 A1 20020418  
AI US 2001-825789 A1 20010404 (9)  
PRAI US 2000-194519P 20000404 (60)  
DT Utility  
FS APPLICATION  
LREP PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711  
CLMN Number of Claims: 38  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1185

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nonpeptide antigens were isolated and purified from Mycobacterium  
    \*\*\*tuberculosis\*\*\* . The antigens were used in vaccine compositions,  
pharmaceutical compositions and methods to elicit an immune response to.  
Mycobacterium \*\*\*tuberculosis\*\*\* in a mammal.

L15 ANSWER 25 OF 28 USPATFULL on STN  
AN 2002:54999 USPATFULL  
TI POLYNUCLEOTIDE \*\*\*TUBERCULOSIS\*\*\* VACCINE  
IN CONTENT, JEAN, RHODE-SAINT-GENESE, BELGIUM  
    HUYGEN, KRIS, BRUSSELS, BELGIUM  
    LIU, MARGARET A., ROSEMONT, PA, UNITED STATES  
    MONTGOMERY, DONNA, CHALFONT, PA, UNITED STATES  
    ULMER, JEFFREY, CHALFONT, PA, UNITED STATES  
PI US 2002032162 A1 20020314  
    US 6384018 B2 20020507  
AI US 1998-10733 A1 19980122 (9)  
RLI Division of Ser. No. US 1994-338992, filed on 14 Nov 1994, GRANTED, Pat.  
    No. US 5736524  
DT Utility  
FS APPLICATION  
LREP JOHN W WALLEN III, MERCK & CO INC, PATENT DEPT, P O BOX 2000, RAHWAY,  
    NJ, 070650907  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 20 Drawing Page(s)  
LN.CNT 1205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding Mycobacterium \*\*\*tuberculosis\*\*\* (M.tb) proteins were  
cloned into eukaryotic expression vectors to express the encoded  
proteins in mammalian muscle cells in vivo. Animals were immunized by  
injection of these DNA constructs, termed polynucleotide vaccines or  
PNV, into their muscles. Immune antisera was produced against M.tb  
antigens. Specific T-cell responses were \*\*\*detected\*\*\* in spleen  
cells of vaccinated mice and the profile of \*\*\*cytokine\*\*\* secretion  
in response to antigen 85 was indicative of a T.sub.h1 type of helper  
T-cell response (i.e., high IL-2 and IFN-.gamma.). Protective efficacy  
of an M.tb DNA vaccine was demonstrated in mice after challenge with  
M.bovis BCG, as measured by a reduction in mycobacterial multiplication

in the spleens and lungs of M.tb DNA-vaccinated mice compared to control DNA-vaccinated mice or primary infection in naive mice.

L15 ANSWER 26 OF 28 USPATFULL on STN  
AN 2001:67182 USPATFULL  
TI Mycobacterium \*\*\*tuberculosis\*\*\* DNA sequences encoding immunostimulatory \*\*\*peptides\*\*\*  
IN Nano, Francis E., Victoria, Canada  
PA University of Victoria Innovation and Development Corp., Victoria, Canada (non-U.S. corporation)  
PI US 6228371 B1 20010508  
AI US 1997-990823 19971215 (8)  
RLI Continuation-in-part of Ser. No. WO 1996-US10375, filed on 14 Jun 1996  
PRAI US 1995-254P 19950615 (60)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Schwartzman, Robert A.  
LREP Klarquist Sparkman Campbell Leigh & Winston LLP  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 15  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1680  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Nucleotide sequences isolated from Mycobacterium \*\*\*tuberculosis\*\*\* are disclosed. These sequences are shown to encode immunostimulatory \*\*\*peptides\*\*\*. The invention encompasses, among other things, vaccine preparations formulated using these \*\*\*peptides\*\*\*.

L15 ANSWER 27 OF 28 USPATFULL on STN  
AN 2001:25674 USPATFULL  
TI TH2-specific gene  
IN Levinson, Doug, Sherborn, MA, United States  
Gu, Wei, Brookline, MA, United States  
Lehar, Sophie, Boston, MA, United States  
PA Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)  
PI US 6190909 B1 20010220  
AI US 1997-884077 19970625 (8)  
RLI Continuation-in-part of Ser. No. US 1997-841901, filed on 17 Apr 1997  
DT Utility  
FS Granted  
EXNAM Primary Examiner: LeGuyader, John L.; Assistant Examiner: Shibuya, Mark L.  
LREP Pennie & Edmonds LLP  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 6 Drawing Page(s)  
LN.CNT 3656  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to the discovery, identification and characterization of nucleic acids that encode a novel protein differentially expressed within the TH2 cell subpopulation (hereinafter referred to as STIF). The invention encompasses STIF nucleotides, host cell expression systems, STIF proteins, fusion proteins, polypeptides and \*\*\*peptides\*\*\*, \*\*\*antibodies\*\*\* to the STIF protein, transgenic animals that express a STIF transgene, or recombinant

knock-out animals that do not express the STIF protein, and compounds that modulate STIF gene expression or STIF activity that can be used for \*\*\*diagnosis\*\*\*, drug screening, clinical trial monitoring, and/or used to treat STIF based disorders, such as proliferative disorders and T-lymphocyte-related disorders including, but not limited to, chronic inflammatory diseases and disorders, such as Crohn's disease, reactive arthritis, including Lyme disease, insulin-dependent diabetes, organ-specific autoimmunity, including multiple sclerosis, Hashimoto's thyroiditis and Grave's disease, contact dermatitis, psoriasis, graft rejection, graft versus host disease, sarcoidosis, atopic conditions, such as asthma and allergy, including allergic rhinitis, gastrointestinal allergies, including food allergies, eosinophilia, conjunctivitis, glomerular nephritis, certain pathogen susceptibilities such as helminthic (e.g., leishmaniasis) and certain viral infections, including HIV, and bacterial infections, including \*\*\*tuberculosis\*\*\* and lepromatous leprosy.

L15 ANSWER 28 OF 28 USPATFULL on STN  
AN 1998:36732 USPATFULL  
TI Polynucleotide \*\*\*tuberculosis\*\*\* vaccine  
IN Content, Jean, Rhode-Saint-Genese, Belgium  
Huygen, Kris, Brussels, Belgium  
Liu, Margaret A., Rosemont, PA, United States  
Montgomery, Donna, Chalfont, PA, United States  
Ulmer, Jeffrey, Chalfont, PA, United States  
PA Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)  
N. V. Innogenetics S.A., Ghent, Belgium (non-U.S. corporation)  
PI US 5736524 19980407  
AI US 1994-338992 19941114 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Chambers, Jasemine C.; Assistant Examiner: Hauda, Karen M.  
LREP Yablonsky, Michael D., Tribble, Jack L.  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1,11  
DRWN 22 Drawing Figure(s); 15 Drawing Page(s)  
LN.CNT 1346  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Genes encoding Mycobacterium \*\*\*tuberculosis\*\*\* (M.tb) proteins were cloned into eukaryotic expression vectors to express the encoded proteins in mammalian muscle cells in vivo. Animals were immunized by injection of these DNA constructs, termed polynucleotide vaccines or PNV, into their muscles. Immune antisera was produced against M.tb antigens. Specific T-cell responses were \*\*\*detected\*\*\* in spleen cells of vaccinated mice and the profile of \*\*\*cytokine\*\*\* secretion in response to antigen 85 was indicative of a T.sub.h 1 type of helper T-cell response (i.e., high IL-2 and IFN-.gamma.). Protective efficacy of an M.tb DNA vaccine was demonstrated in mice after challenge with M. bovis BCG, as measured by a reduction in mycobacterial multiplication in the spleens and lungs of M.tb DNA-vaccinated mice compared to control DNA-vaccinated mice or primary infection in naive mice.

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STN INTERNATIONAL LOGOFF AT 17:40:38 ON 22 FEB 2005

\*\*\*\*\* STN Columbus \*\*\*\*\*  
=> file cabca caplus embase japiro lifesci medline scisearch uspatfull  
=> S MYCOBACT? AND cd8?  
L1 6127 MYCOBACT? AND CD8?  
=> s 11 and ((t-cell?)or(thymocyte?)or(t cell?))  
2 FILES SEARCHED...  
3 FILES SEARCHED...  
6 FILES SEARCHED...  
L3 5472 L1 AND ((T-CELL?) OR(THYMOCYTE?) OR(T CELL?))  
=> dup rem 13  
L4 3593 DUP REM L3 (1879 DUPLICATES REMOVED)  
=> s 14 and (cytokin? or prolifer?)  
L5 2937 L4 AND (CYTOKIN? OR PROLIFER?)  
=> s 15 and esat-6  
L6 50 L5 AND ESAT-6  
=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 50 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 50 CAPIUS COPYRIGHT 2005 ACS on STN

AN 2004:534402 CAPIUS

DN 141:70218

TI Diagnostic method and assay kit

IN Barry, Simon

PA Royal Free Hampstead NHS Trust, UK

SO PCT. Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004055516	A1	20040701	WO 2003-GB305084	20031124
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				

PRAI GB 2002-29444 A 20021218

AB The invention provides a method of diagnosis of infection by a pathogenic organism wherein lymphocytes in or from isolated bronchoalveolar lavage fluid are exposed to an antigen specific to said pathogen and the resulting \*\*\*cytokine\*\*\* prodn. by said lymphocytes is indicative of a pos. diagnosis. Also provided is a diagnostic assay kit adapted or assemblable to perform the method.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 50 CAPIUS COPYRIGHT 2005 ACS on STN

AN 2004:354972 CAPIUS

DN 140:373880

TI Antigen-scFv fusion proteins for targeting antigen-presenting cells against infection, autoimmune disease and cancer

IN Britton, Warwick; Demangel, Caroline  
PA Centenary Institute Cancer Medicine & Cell Biology, Australia  
SO PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004035619	A1	20040429	WO 2003-AU1392	20031020
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004146948	A1	20040729	US 2003-689921	20031017
PRAI	US 2002-420232P	P	20021018		

AB Provided are single-chain Fv (scFv) fragment-based compns. and methods for targeting antigens to antigen-presenting cells (APCs) such as, for example, dendritic cells (DC). The scFvs are derived from monoclonal antibody NLDC-145 and N418 which are directed to DEC-205 and CD11c antigens (mouse dendritic cell receptors). Compns. and methods disclosed herein are useful for the treatment of disorders including infectious, autoimmune and neoplastic diseases.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 50 CAPIUS COPYRIGHT 2005 ACS on STN

AN 2004:44096 CAPIUS

DN 140:215920

TI Different \*\*\*cytokine\*\*\* production and effector/memory dynamics of .alpha..beta.+ or .gamma..vdelta.+ \*\*\*T\*\*\* - \*\*\*cell\*\*\* subsets in the peripheral blood of patients with active pulmonary tuberculosis

AU Gioia, C.; Agrati, C.; Goletti, D.; Vincenti, D.; Carrara, S.; Amicosante, M.; Casarini, M.; Giosue, S.; Puglisi, G.; Rossi, A.; Colizzi, V.; Pucillo, L. P.; Poccia, F.

CS Laboratory of Clinical Pathology, National Institute for Infectious Diseases (I.N.M.I.) "Lazzaro Spallanzani" I.R.C.C.S., Rome, Italy

SO International Journal of Immunopathology and Pharmacology (2003), 16(3), 247-252

CODEN: IJIPE4; ISSN: 0394-6320

PB Biolife s.a.s.

DT Journal

LA English

AB Immunity to *M. tuberculosis* (MTB) infection consists of interactions between various \*\*\*T\*\*\* - \*\*\*cell\*\*\* subsets that control the infection and prevent further reactivation. We analyzed the effector/memory \*\*\*T\*\*\* - \*\*\*cell\*\*\* dynamics and \*\*\*cytokines\*\*\* prodn. in the peripheral blood of patients with pulmonary tuberculosis (TB). We obsd. that the frequency of CD4+ \*\*\*T\*\*\* - \*\*\*cell\*\*\* effectors was significantly increased during active TB, confirming a major role of this \*\*\*T\*\*\* - \*\*\*cell\*\*\* subset in TB immunity.

Pre-terminally differentiated \*\*\*CD8\*\*\* + T-lymphocytes were increased in the peripheral blood as well. In contrast, we obsd. a reduced no. of effector \*\*\*mycobacteria\*\*\* -reactive .gamma..vdelta.+ T-lymphocytes with a specific defects in reacting to \*\*\*mycobacterial\*\*\* nonpeptidic antigens, suggesting that this innate response is rapidly lost during TB infection. Nevertheless, the frequency of .gamma..vdelta.+ \*\*\*T\*\*\* - \*\*\*cells\*\*\* effectors in TB patients was higher than the .alpha..beta.+ \*\*\*T\*\*\* - \*\*\*cell\*\*\* response to peptide from MTB- \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* protein and quant. similar to PPD reactivity. Thus, .alpha..beta.+ and .gamma..vdelta.+ \*\*\*T\*\*\* - \*\*\*cell\*\*\* differentiation and function are differently triggered by active TB infection.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 50 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:716868 CAPLUS  
DN 137:246533  
TI \*\*\*Mycobacterium\*\*\* tuberculosis epitopes in vaccines and detection of \*\*\*mycobacterial\*\*\* -specific cytotoxic \*\*\*T\*\*\* - \*\*\*cells\*\*\*  
IN Lalvani, Ajit; Pathan, Ansar A.; Hill, Adrian V. S.  
PA UK  
SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 467,893, abandoned.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002131976	A1	20020919	US 2001-916201	20010727
	US 2004141985	A1	20040722	US 2003-721798	20031126
PRAI	US 1998-113783P	P	19981223		
	US 1999-467893	B2	19991221		
	US 2001-916201	B3	20010727		

AB A method of detecting an anti- \*\*\*mycobacterial\*\*\* \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* response comprising contacting a population of \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cells\*\*\* of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO: 1 and/or 2, wherein one or more of said peptides may be substituted by an analog which binds a \*\*\*T\*\*\* \*\*\*cell\*\*\* receptor which recognizes the corresponding substituted peptide, and detg. whether \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cells\*\*\* of the \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* population recognize the peptide(s). The invention also provides a method of vaccinating against infection by a \*\*\*mycobacterium\*\*\*, wherein the vaccination leads to a \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* response, comprising administering (i) a \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* epitope of a \*\*\*mycobacterium\*\*\* protein, (ii) an analog of the epitope which is capable of inhibiting the binding of the epitope to a \*\*\*T\*\*\* \*\*\*cell\*\*\* receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii). The method of detecting \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cells\*\*\* is an ELISPOT assay which detects interferon-.gamma., released by the \*\*\*T\*\*\* \*\*\*cells\*\*\* following peptide recognition, using an immobilized anti-IFN-.gamma. antibody.

L6 ANSWER 5 OF 50 CAPIUS COPYRIGHT 2005 ACS on STN  
AN 2001:89359 CAPIUS  
DN 135:209533  
TI Vaccinia expression of \*\*\*Mycobacterium\*\*\* tuberculosis-secreted proteins: tissue plasminogen activator signal sequence enhances expression and immunogenicity of M. tuberculosis Ag85  
AU Malin, Adam S.; Huygen, Kris; Content, Jean; Mackett, Michael; Brandt, Lisa; Andersen, Peter; Smith, Steven M.; Dockrell, Hazel M.  
CS Immunology Unit, London School of Hygiene & Tropical Medicine, London, WC1E 7HT, UK  
SO Microbes and Infection (2000), 2(14), 1677-1685  
CODEN: MCINFS; ISSN: 1286-4579  
PB Editions Scientifiques et Medicales Elsevier  
DT Journal  
LA English  
AB There is increasing evidence to implicate a role for \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* in protective immunity against tuberculosis. Recombinant vaccinia (rVV) expressing \*\*\*Mycobacterium\*\*\* tuberculosis (MTB) proteins can be used both as tools to dissect \*\*\*CD8\*\*\* + \*\*\*T\*\*\* - \*\*\*cell\*\*\* responses and, in attenuated form, as candidate vaccines capable of inducing a balanced CD4+/ \*\*\*CD8\*\*\* + \*\*\*T\*\*\* - \*\*\*cell\*\*\* response. A panel of rVV was constructed to express four immunodominant secreted proteins of MTB: 85A, 85B and 85C and \*\*\*ESAT\*\*\* - \*\*\*6\*\*\*. A parallel group of rVV was constructed to include the heterologous eukaryotic tissue plasminogen activator (tPA) signal sequence to assess if this would enhance expression and immunogenicity. Clear expression was obtained for 85A, 85B and \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* and the addn. of tPA resulted in N-glycosylation and a 4-10-fold increase in expression. Female C57BL/6 mice were immunized using the rVV-Ag85 constructs, and interleukin-2 and gamma-interferon were assayed using a co-culture of immune splenocytes and recall antigen. There was a marked increase in \*\*\*cytokine\*\*\* prodn. in mice immunized with the tPA-contg. constructs. We report the first data demonstrating enhanced immunogenicity of rVV using a tPA signal sequence, which has significant implications for future vaccine design.  
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 50 CAPIUS COPYRIGHT 2005 ACS on STN  
AN 1999:651483 CAPIUS  
DN 131:335735  
TI Characterization of human \*\*\*Mycobacterium\*\*\* bovis bacille calmette-guerin-reactive \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\*  
AU Smith, Steven M.; Malin, Adam S.; Lukey, Pauline T.; Atkinson, Sara E.; Content, Jean; Huygen, Kris; Dockrell, Hazel M.  
CS Immunology Unit, Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, WC1E 7HT, UK  
SO Infection and Immunity (1999), 67(10), 5223-5230  
CODEN: INFIBR; ISSN: 0019-9567  
PB American Society for Microbiology  
DT Journal  
LA English  
AB Gamma interferon (IFN-.gamma.)-secreting CD4+ \*\*\*T\*\*\* \*\*\*cells\*\*\* have long been established as an essential component of the protective immune response against \*\*\*Mycobacterium\*\*\* tuberculosis. It is now becoming evident from studies with the murine model of tuberculosis that

an important role also exists for major histocompatibility complex (MHC) class I-restricted \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\*. These cells are capable of acting as both IFN-.gamma. secretors and cytotoxic T lymphocyte (CTL) effectors; however, their exact role in immunity against tuberculosis remains unclear. This study demonstrates the presence of \*\*\*Mycobacterium\*\*\* bovis BCG-reactive \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* in healthy BCG-vaccinated donors and that these \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* are potent \*\*\*cytokine\*\*\* producers as well as cytotoxic effector cells. Using FACScan anal., we have shown that restimulation with live *M. bovis* BCG induced more \*\*\*CD8\*\*\* + - \*\*\*T\*\*\* - \*\*\*cell\*\*\* activation than the sol. antigen purified protein deriv. and that these cells are actively producing the type 1 \*\*\*cytokines\*\*\* IFN-.gamma. and tumor necrosis factor alpha (TNF-.alpha.). These \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* also contain the cytolytic granule perforin and are capable of acting as potent CTLs against *M. bovis* BCG-infected macrophages. The \*\*\*mycobacterial\*\*\* antigens 85A and B (Ag85A and Ag85B, resp.), and to a lesser extent the 19- and 38-kDa proteins, are major antigenic targets for these \*\*\*mycobacterium\*\*\*-specific \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\*, while whole-*M. bovis* BCG activated effector cells from these BCG-vaccinated donors, as expected, failed to recognize the 6-kDa \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* protein. The use of metabolic inhibitors and blocking antibodies revealed that the \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* recognize antigen processed and presented via the classical MHC class I pathway. These data suggest that \*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cells\*\*\* may play a crit. role in the human immune response to tuberculosis infection.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 50 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN  
AN 2003:159522 SCISEARCH  
GA The Genuine Article (R) Number: 642ZC  
TI Persistence and turnover of antigen-specific CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* during chronic tuberculosis infection in the mouse  
AU Winslow G M (Reprint); Roberts A D; Blackman M A; Woodland D L  
CS Wadsworth Ctr, 120 New Scotland Ave, Albany, NY 12208 USA (Reprint); New York State Dept Hlth, Wadsworth Ctr, Albany, NY 12201 USA; Trudeau Inst Inc, Saranac Lake, NY 12983 USA  
CYA USA  
SO JOURNAL OF IMMUNOLOGY, (15 FEB 2003) Vol. 170, No. 4, pp. 2046-2052.  
Publisher: AMER ASSOC IMMUNOLOGISTS, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814 USA.  
ISSN: 0022-1767.  
DT Article; Journal  
LA English  
REC Reference Count: 35  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*  
AB CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* are critical for resistance to \*\*\*Mycobacterium\*\*\* tuberculosis infection, but how effective \*\*\*T\*\*\* \*\*\*cell\*\*\* responses are maintained during chronic infection is not well understood. To address this question we examined the CD4 \*\*\*T\*\*\* \*\*\*cell\*\*\* response to a peptide from \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* during tuberculosis infection in the mouse. The FSAT-6(1-20) /IA(b)-specific CD4 \*\*\*T\*\*\* \*\*\*cell\*\*\* response in the lungs, mediastinal lymph nodes, and spleen reached maxima 3-4 wk postinfection, when the bacteria came

under the control of the immune response. Once chronic infection was established, the relative frequencies of Ag-specific CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* were maintained at nearly constant levels for at least 160 days. \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* (1-20)/IA(b)-specific CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* that responded in vitro expressed activation markers characteristic of chronically activated effector cells and used a limited Vbeta repertoire that was clonally stable in vivo for at least 12 wk. 5-Bromo-2-deoxyuridine incorporation studies indicated a relatively high rate of cell division among both total CD4 and ESAT61-20/IA b-specific CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* during acute infection, but the degree of 5-bromo-2-deoxyuridine incorporation by both the CD4 \*\*\*T\*\*\* \*\*\*cells\*\*\* and the Ag-specific cells declined at least 3-fold during chronic infection. The data indicate that the peripheral \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* (1-20)/ IA(b)-specific CD4 \*\*\*T\*\*\* \*\*\*cell\*\*\* response

to

*M. tuberculosis* is characterized during the acute phase of infection by a period of extensive \*\*\*proliferation\*\*\*, but once bacterial control is achieved, this is followed during chronic infection by an extended containment phase that is associated with a persistent response of activated, yet more slowly \*\*\*proliferating\*\*\*, \*\*\*T\*\*\* \*\*\*cells\*\*\*.

L6 ANSWER 8 OF 50 USPATFULL on STN  
AN 2005:49883 USPATFULL  
TI Diagnostic indicator of thymic function  
IN Boyd, Richard, Hampton, AUSTRALIA  
PA Chidgey, Ann Patricia, Black Rock, AUSTRALIA  
Monash University (non-U.S. corporation)  
PI US 2005042679 A1 20050224  
AI US 2003-749120 A1 20031230 (10)  
RLI Continuation-in-part of Ser. No. US 2004-399213, filed on 13 Feb 2004, PENDING A 371 of International Ser. No. WO 2001-AU1291, filed on 15 Oct 2001, UNKNOWN Continuation-in-part of Ser. No. US 2003-418953, filed on 18 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2001-977074, filed on 12 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-885268, filed on 1 Aug 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755965, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755983, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755646, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-758910, filed on 10 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. WO 2000-AU329, filed on 17 Apr 2000, UNKNOWN  
PRAI AU 2000-745 20001013  
AU 1999-9778 19990415  
WO 2000-AU329 20000417  
WO 2001-AU1291 20011015  
US 2003-527001P 20031205 (60)

DT Utility  
FS APPLICATION  
LREP WILMER CUTLER PICKERING HALE AND DORR LLP, 60 STATE STREET, BOSTON, MA, 02109  
CLMN Number of Claims: 60  
ECL Exemplary Claim: CLM-01-37  
DRWN 49 Drawing Page(s)  
LN.CNT 5605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present disclosure provides a method for determining whether a patient's immune system can be modified through stimulation of thymus function. In one embodiment, sex steroids are ablated in the patient, and the resulting production of thymic factors is monitored. In particular, the level of these factors in the patient's blood stream is observed. In another embodiment, the level of new \*\*\*T\*\*\*  
\*\*\*cells\*\*\* is monitored. An early response, such as within hours or days of the ablation, indicates that the patient's thymus is disposed to regeneration through sex steroid ablation.

L6 ANSWER 9 OF 50 USPATFULL on STN  
AN 2005:30317 USPATFULL  
TI Vaccine  
IN Laidlaw, Stephen, Wantage, UNITED KINGDOM  
Skinner, Mike, Wantage, UNITED KINGDOM  
Hill, Adrian V.S., Oxford, UNITED KINGDOM  
Gilbert, Sarah C., Oxford, UNITED KINGDOM  
Anderson, Richard, Headington, UNITED KINGDOM  
PA Isis Innovation Ltd., Oxford, UNITED KINGDOM (non-U.S. corporation)  
PI US 2005025747 A1 20050203  
AI US 2004-856118 A1 20040527 (10)  
RLI Continuation of Ser. No. WO 2002-GB5411, filed on 2 Dec 2002, UNKNOWN  
PRAI GB 2001-28733 20011130  
US 2001-334649P 20011130 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 57  
ECL Exemplary Claim: 1  
DRWN 95 Drawing Page(s)  
LN.CNT 8060

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a fowlpox virus genome which has modifications in one or more wild-type FPV genes. The present invention also relates to a viral particle comprising such a genome and its use to deliver a nucleotide of interest (NOI) to a target cell. The present invention also relates to vaccination methods, particularly a method which comprises administering a priming composition (which comprises a first non-replicating viral vector) and a boosting composition (which comprises a second non-replicating viral vector) to a subject to treat and/or prevent a disease.

L6 ANSWER 10 OF 50 USPATFULL on STN  
AN 2005:23975 USPATFULL  
TI Hematopoietic stem cell gene therapy  
IN Boyd, Richard L., Hampton, AUSTRALIA  
PA Monash University (non-U.S. corporation)

PI US 2005020524 A1 20050127  
AI US 2003-748831 A1 20031230 (10)  
RLI Continuation-in-part of Ser. No. US 2003-419068, filed on 18 Apr 2003,  
PENDING Continuation-in-part of Ser. No. US 2001-976712, filed on 12 Oct  
2001, ABANDONED Continuation-in-part of Ser. No. US 2001-969510, filed  
on 1 Oct 2001, ABANDONED Continuation-in-part of Ser. No. US  
2001-966576, filed on 26 Sep 2001, ABANDONED Continuation-in-part of  
Ser. No. US 2001-758910, filed on 10 Jan 2001, ABANDONED  
Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000,  
ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13  
Oct 2000, ABANDONED Continuation-in-part of Ser. No. WO 2000-AU329,  
filed on 17 Apr 2000, UNKNOWN

PRAI AU 1999-9778 19990415  
AU 2000-745 20001013  
WO 2002-AU101291 20021015  
US 2003-527001P 20031205 (60)

DT Utility

FS APPLICATION

LREP WILMER CUTLER PICKERING HALE AND DORR LLP, 60 STATE STREET, BOSTON, MA,  
02109

CLMN Number of Claims: 82

ECL Exemplary Claim: 1

DRWN 49 Drawing Page(s)

LN.CNT 5499

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present disclosure provides methods for gene therapy utilizing hematopoietic stem cells, lymphoid progenitor cells, and/or myeloid progenitor cells. The cells are genetically modified to provide a gene that is expressed in these cells and their progeny after differentiation. In one embodiment the cells contain a gene or gene fragment that confers to the cells resistance to HIV infection and/or replication. The cells are administered to a patient in conjunction with treatment to reactivate the patient's thymus. The cells may be autologous, syngeneic, allogeneic or xenogeneic, as tolerance to foreign cells is created in the patient during reactivation of the thymus. In one embodiment the hematopoietic stem cells are CD34+. The patient's thymus is reactivated by disruption of sex steroid mediated signaling to the thymus. In another embodiment, this disruption is created by administration of LHRH agonists, LHRH antagonists, anti-LHRH receptor antibodies, anti-LHRH vaccines or combinations thereof.

L6 ANSWER 11 OF 50 USPATFULL on STN

AN 2005:16804 USPATFULL

TI Diagnostic assay for measuring a cell mediated immune response

IN Rothel, James Stuart, Victoria, AUSTRALIA

Wild, Steven Paul, Victoria, AUSTRALIA

Cosgriff, Angela, Victoria, AUSTRALIA

PI US 2005014205 A1 20050120

AI US 2004-477571 A1 20040915 (10)

WO 2003-AU1464 20031106

PRAI AU 2002-2002952548 20021108

DT Utility

FS APPLICATION

LREP SCULLY SCOTT MURPHY & PRESSER, PC, 400 GARDEN CITY PLAZA, GARDEN CITY,  
NY, 11530

CLMN Number of Claims: 72

ECL Exemplary Claim: 1

DRWN 2 Drawing Page(s)

LN.CNT 1394

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to a diagnostic assay and, more particularly, an assay for measuring cell-mediated immune reactivity. Even more particularly, the present invention provides an assay and a kit for measuring a cell-mediated response to an antigen using whole blood or other suitable biological sample. The assay may be conducted using ligands to immune effector molecules or at the nucleic acid level, screening for expression of genes encoding the immune effector molecules. The assay is useful in therapeutic and diagnostic protocols for human, livestock and veterinary and wild life applications.

L6 ANSWER 12 OF 50 USPATFULL on STN

AN 2005:3811 USPATFULL

TI Hematopoietic stem cell gene therapy

IN Boyd, Richard, Hampton, AUSTRALIA

PA Monash University (non-U.S. corporation)

PI US 2005002913 A1 20050106

AI US 2003-419068 A1 20030418 (10)

RLI Continuation-in-part of Ser. No. US 2001-976712, filed on 12 Oct 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-969510, filed on 1 Oct 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-966576, filed on 26 Sep 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-758910, filed on 10 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. WO 2000-AU329, filed on 17 Apr 2000, UNKNOWN

PRAI AU 1999-9778 19990415

AU 2000-745 20001013

WO 2000-AU329 20000417

WO 2002-AU101291 20020418

DT Utility

FS APPLICATION

LREP WILMER CUTLER PICKERING HALE AND DORR LLP, 60 STATE STREET, BOSTON, MA, 02109

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 49 Drawing Page(s)

LN.CNT 4410

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present disclosure provides methods for gene therapy utilizing hematopoietic stem cells, lymphoid progenitor cells, and/or myeloid progenitor cells. The cells are genetically modified to provide a gene that is expressed in these cells and their progeny after differentiation. In one embodiment the cells contain a gene or gene fragment that confers to the cells resistance to HIV infection and/or replication. The cells are administered to a patient in conjunction with treatment to reactivate the patient's thymus. The cells may be autologous, syngeneic, allogeneic or xenogeneic, as tolerance to foreign cells is created in the patient during reactivation of the thymus. In one embodiment the hematopoietic stem cells are CD34.sup.+ . The patient's thymus is reactivated by disruption of sex steroid mediated signaling to the thymus. In another embodiment, this disruption is created by administration of LHRH agonists, LHRH antagonists, anti-LHRH receptor antibodies, anti-LHRH vaccines or combinations thereof.

L6 ANSWER 13 OF 50 USPATFULL on STN  
AN 2004:321694 USPATFULL  
TI \*\*\*Mycobacterial\*\*\* antigens expressed under low oxygen tension  
IN James, Brian William, Wiltshire, UNITED KINGDOM  
Bacon, Joanna, Wiltshire, UNITED KINGDOM  
Marsh, Philip, Wiltshire, UNITED KINGDOM  
PI US 2004254349 A1 20041216  
AI US 2004-481265 A1 20040719 (10)  
WO 2002-GB2845 20020621  
PRAI GB 2001-15365 20010622  
GB 2001-21780 20010907  
DT Utility  
FS APPLICATION  
LREP Sterne Kessler, Goldstein & Fox, Suite 600, 1100 New York Avenue NW,  
Washington, DC, 20005-3934  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 7013

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying \*\*\*mycobacterial\*\*\* genes that are induced or up-regulated under continuous culture conditions defined by a dissolved oxygen tension of up to 10% air saturation measured at 37.degree. C. when compared with a dissolved oxygen tension of at least 40% air saturation measured at 37.degree. C. Said induced or up-regulated genes form the basis of nucleic acid vaccines, or provide targets to allow preparation of attenuated \*\*\*mycobacteria\*\*\* for vaccines against \*\*\*mycobacterial\*\*\* infections. Similarly, peptides encoded by said induced or up-regulated genes are employed in vaccines. In a further embodiment, the identified genes/peptides provide the means for identifying the presence of a \*\*\*mycobacterial\*\*\* infection in a clinical sample by nucleic acid probe or antibody detection.

L6 ANSWER 14 OF 50 USPATFULL on STN  
AN 2004:321058 USPATFULL  
TI \*\*\*Mycobacterial\*\*\* genes down-regulated during latency  
IN James, Brian William, Salisbury Wiltshire, UNITED KINGDOM  
Hampshire, Tobias, Salisbury Wiltshire, UNITED KINGDOM  
Marsh, Philip, Salisbury Wiltshire, UNITED KINGDOM  
PI US 2004253711 A1 20041216  
AI US 2004-493462 A1 20040812 (10)  
WO 2002-GB4718 20021021  
PRAI GB 2001-25535 20011024  
DT Utility  
FS APPLICATION  
LREP Sterne Kessler, Goldstein & Fox, Suite 600, 1100 New York Avenue NW,  
Washington, DC, 20005-3934  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 4422

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying \*\*\*mycobacterial\*\*\* genes the expression of which is down-regulated during a stationary phase culture of \*\*\*mycobacteria\*\*\* under nutrient-starving conditions when compared with an exponential phase culture of \*\*\*mycobacteria\*\*\*

under culture conditions that are not nutrient-starving and that support exponential growth of said \*\*\*mycobacteria\*\*\*. The described method optionally provides for identifying \*\*\*mycobacterial\*\*\* genes that are simultaneously down-regulated under low DOT conditions. The down-regulated genes of the present invention form the basis of nucleic acid vaccines, or provide targets to allow preparation of attenuated \*\*\*mycobacteria\*\*\* for vaccines against \*\*\*mycobacterial\*\*\* infections. Similarly, peptides encoded by said down-regulated genes are employed in vaccines. In a further embodiment, the identified genes/peptides provide the means for identifying the presence of a \*\*\*mycobacterial\*\*\* infection in a clinical sample by nucleic acid probe or antibody detection.

L6 ANSWER 15 OF 50 USPATFULL on STN  
AN 2004:307171 USPATFULL  
TI Stimulation of thymus for vaccination development  
IN Boyd, Richard L., Hampton, AUSTRALIA  
PA Monash University (non-U.S. corporation)  
PI US 2004241842 A1 20041202  
AI US 2003-748450 A1 20031230 (10)  
RLI Continuation-in-part of Ser. No. US 2003-418747, filed on 18 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2001-977479, filed on 12 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-965394, filed on 26 Sep 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755965, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755983, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755646, filed on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-758910, filed on 10 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED Continuation-in-part of Ser. No. WO 2000-AU329, filed on 17 Apr 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2000-AU329, filed on 17 Apr 2000, UNKNOWN  
PRAI WO 2001-AU1291 20011015  
AU 1999-9778 19990415  
AU 2000-745 20001013  
US 2003-527001P 20031205 (60)  
DT Utility  
FS APPLICATION  
LREP Shann Kerner, Ph.D., HALE AND DORR LLP, 60 State Street, Boston, MA, 02109  
CLMN Number of Claims: 60  
ECL Exemplary Claim: CLM-01-14  
DRWN 49 Drawing Page(s)  
LN.CNT 5377  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present disclosure provides methods for enhancing the response of a patient's immune system to vaccination. This is accomplished by reactivating the thymus. Optionally, hematopoietic stem cells, autologous, syngeneic, allogeneic or xenogeneic, are delivered to

increase the speed of regeneration of the patient's immune system. In one embodiment the hematopoietic stem cells are CD34.sup.+ . The patient's thymus is reactivated by disruption of sex steroid mediated signaling to the thymus. In one embodiment, this disruption is created by administration of LHRH agonists, LHRH antagonists, anti-LHRH receptor antibodies, anti-LHRH vaccines or combinations thereof.

L6 ANSWER 16 OF 50 USPATFULL on STN  
AN 2004:307155 USPATFULL  
TI \*\*\*Mycobacterial\*\*\* antigens expressed during latency  
IN James, Brian William, Salisbury, UNITED KINGDOM  
Marsh, Philip, Salisbury, UNITED KINGDOM  
Hampshire, Tobias, Salisbury, UNITED KINGDOM  
PI US 2004241826 A1 20041202  
AI US 2004-482706 A1 20040719 (10)  
WO 2002-GB3052 20020704  
PRAI GB 2001-16385 20010704  
DT Utility  
FS APPLICATION  
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W.,  
WASHINGTON, DC, 20005  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 3180  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A method is provided for identifying \*\*\*mycobacterial\*\*\* genes that are induced or up-regulated under culture conditions that are nutrient-starving and which maintain \*\*\*mycobacterial\*\*\* latency, said conditions being obtainable by batch fermentation of a \*\*\*mycobacterium\*\*\* for at least 20 days post-inoculation, when compared with culture conditions that are not nutrient-starving and which support exponential growth of said \*\*\*mycobacterium\*\*\* . Said induced or up-regulated genes form the basis of nucleic acid vaccines, or provide targets to allow preparation of attenuated \*\*\*mycobacteria\*\*\* for vaccines against \*\*\*mycobacterial\*\*\* infections. Similarly, peptides encoded by said induced or up-regulated genes are employed in vaccines. In a further embodiment, the identified genes/peptides provide the means for identifying the presence of a \*\*\*mycobacterial\*\*\* infection in a clinical sample by nucleic acid probe or antibody detection.

L6 ANSWER 17 OF 50 USPATFULL on STN  
AN 2004:291796 USPATFULL  
TI Listeria attenuated for entry into non-phagocytic cells, vaccines comprising the listeria, and methods of use thereof  
IN Dubensky, Thomas W., JR., Piedmont, CA, UNITED STATES  
Brockstedt, Dirk G., Oakland, CA, UNITED STATES  
Cook, David, Lafayette, CA, UNITED STATES  
PI US 2004228877 A1 20041118  
AI US 2004-773792 A1 20040206 (10)  
PRAI US 2003-446051P 20030206 (60)  
US 2003-449153P 20030221 (60)  
US 2003-490089P 20030724 (60)  
US 2003-511719P 20031015 (60)  
US 2003-511919P 20031015 (60)  
US 2003-511869P 20031015 (60)

US 2004-541515P 20040202 (60)  
DT Utility  
FS APPLICATION  
LREP MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018  
CLMN Number of Claims: 60  
ECL Exemplary Claim: 1  
DRWN 26 Drawing Page(s)  
LN.CNT 3714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides Listeria that are attenuated for entry into non-phagocytic cells as well as a variety of methods of inducing immune responses involving administering compositions comprising the attenuated Listeria. Some of the attenuated Listeria are mutant Listeria that comprise at least one mutation in a gene encoding an invasin, such as an internalin. Some of the attenuated Listeria are further attenuated for cell-to-cell spread. Pharmaceutical compositions and vaccines useful in the methods of the invention are further provided. Methods of making and improving vaccines are also provided.

L6 ANSWER 18 OF 50 USPATFULL on STN  
AN 2004:253818 USPATFULL  
TI Modified free-living microbes, vaccine compositions and methods of use thereof  
IN Dubensky, Thomas W., JR., Piedmont, CA, UNITED STATES  
Brockstedt, Dirk G., Oakland, CA, UNITED STATES  
Bahjat, Keith, Concord, CA, UNITED STATES  
Hearst, John E., Berkeley, CA, UNITED STATES  
Cook, David, Lafayette, CA, UNITED STATES  
PI US 2004197343 A1 20041007  
AI US 2004-773618 A1 20040206 (10)  
PRAI US 2003-446051P 20030206 (60)  
US 2003-449153P 20030221 (60)  
US 2003-490089P 20030724 (60)  
US 2003-511869P 20031015 (60)  
US 2004-541515P 20040202 (60)  
DT Utility  
FS APPLICATION  
LREP MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018  
CLMN Number of Claims: 82  
ECL Exemplary Claim: 1  
DRWN 51 Drawing Page(s)  
LN.CNT 7204

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Free-living microbes are provided in which the nucleic acid has been modified so that the microbe is attenuated for \*\*\*proliferation\*\*\* and/or which comprise genetic mutations that attenuate the ability of the microbe to repair its nucleic acid. Methods of using the modified microbes for the loading, activation, and/or maturation of antigen-presenting cells are also provided. Vaccine compositions comprising the modified microbes and/or the antigen-presenting cells and methods of using the vaccines are also provided. The microbes may be further modified to include heterologous antigens, such as tumor antigens or infectious disease antigens, for use as a vaccine against cancer or infectious diseases.

L6 ANSWER 19 OF 50 USPATFULL on STN  
AN 2004:190178 USPATFULL

TI Compositions and methods for targeting antigen-presenting cells with antibody single-chain variable region fragments  
IN Britton, Warwick, Bardwell Park, AUSTRALIA  
Demangel, Caroline, Paris, FRANCE  
PA CENTENARY INSTITUTE OF CANCER MEDICINE AND CELL BIOLOGY, Camperdown, AUSTRALIA, 2050 (non-U.S. corporation)

PI US 2004146948 A1 20040729  
AI US 2003-689921 A1 20031017 (10)  
PRAI US 2002-420232P 20021018 (60)

DT Utility

FS APPLICATION

LREP SPECKMAN LAW GROUP PLLC, 1501 WESTERN AVE, SEATTLE, WA, 98101

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN 9 Drawing Page(s)

LN.CNT 2038

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided are single-chain Fv (scFv) fragment-based compositions and methods for targeting antigens to antigen-presenting cells (APCs) such as, for example, dendritic cells (DC). Compositions and methods disclosed herein are useful in the treatment of diseases including infectious diseases and cancer.

L6 ANSWER 20 OF 50 USPATFULL on STN

AN 2004:184102 USPATFULL

TI Tuberculosis vaccine

IN Lalvani, Ajit, Oxford, UNITED KINGDOM  
Pathan, Ansar A., Oxford, UNITED KINGDOM

PA ISIS INNOVATION LIMITED, Oxford, UNITED KINGDOM (non-U.S. corporation)

PI US 2004141985 A1 20040722

AI US 2003-721798 A1 20031126 (10)

RLI Division of Ser. No. US 2001-916201, filed on 27 Jul 2001, ABANDONED  
Continuation-in-part of Ser. No. US 1999-467893, filed on 21 Dec 1999,  
ABANDONED

PRAI US 1998-113783P 19981223 (60)

DT Utility

FS APPLICATION

LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 1505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of detecting an anti- \*\*\*mycobacterial\*\*\* \*\*\*CD8\*\*\*  
\*\*\*T\*\*\* \*\*\*cell\*\*\* response comprising contacting a population of  
\*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cells\*\*\* of an individual with one or  
more peptides selected from the peptides represented by SEQ ID NO: 3, 4,  
7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides  
represented by SEQ ID NO: 1 and/or 2, wherein one or more of said  
peptides may be substituted by an analogue which binds a \*\*\*T\*\*\*  
\*\*\*cell\*\*\* receptor which recognises the corresponding substituted  
peptide, and determining whether \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cells\*\*\*  
of the \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* population recognize the  
peptide(s).

The invention also provides a method of vaccinating against infection by

a \*\*\*mycobacterium\*\*\*, wherein the vaccination leads to a \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* response, comprising administering (i) a \*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* epitope of a \*\*\*mycobacterium\*\*\* protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a \*\*\*T\*\*\* \*\*\*cell\*\*\* receptor, (iii) a precursor or (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

L6 ANSWER 21 OF 50 USPATFULL on STN

AN 2004:144604 USPATFULL

TI Protection against \*\*\*mycobacterial\*\*\* infections

IN Vipond, Richard, Wiltshire, UNITED KINGDOM

Shuttleworth, Helen, Salisbury Wiltshire, UNITED KINGDOM

Ambrose, Emma, Alberta, CANADA

Minton, Nigel Peter, Wiltshire, UNITED KINGDOM

PI US 2004110269 A1 20040610

AI US 2004-432934 A1 20040210 (10)

WO 2001-GB5250 20011128

PRAI GB 2000-28966 20001128

DT Utility

FS APPLICATION

LREP Sterne Kessler, Goldstein & Fox, Suite 600, 1100 New York Avenue NW, Washington, DC, 20005-3934

CLMN Number of Claims: 29

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 5805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method of identifying \*\*\*mycobacterial\*\*\* genes which were induced or up-regulated during M.

tuberculosis virulence, and to isolated peptide products of said genes. Also provided, are inhibitors of said genes, and antibodies which bind to said peptide products. Further embodiments include DNA and RNA vectors encoding said products, attenuated \*\*\*mycobacteria\*\*\* in which the activity of at least one of said genes or peptide products has been modified, vaccines against \*\*\*mycobacterial\*\*\* infections, and methods of detecting a \*\*\*mycobacterial\*\*\* infection.

L6 ANSWER 22 OF 50 USPATFULL on STN

AN 2004:113684 USPATFULL

TI Fusion proteins of \*\*\*mycobacterium\*\*\* tuberculosis

IN Skeiky, Yasir, Seattle, WA, UNITED STATES

Reed, Steven, Bellevue, WA, UNITED STATES

Alderson, Mark, Bainbridge Island, WA, UNITED STATES

PI US 2004086523 A1 20040506

AI US 2001-886349 A1 20010620 (9)

RLI Continuation-in-part of Ser. No. US 2000-597796, filed on 20 Jun 2000, PENDING

PRAI US 2001-265737P 20010201 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 88

ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 5261

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and fusion proteins containing at least two \*\*\*Mycobacterium\*\*\* sp. antigens, and nucleic acids encoding such compositions and fusion proteins. The compositions of the invention increase serological sensitivity of sera from individuals infected with tuberculosis, and methods for their use in the diagnosis, treatment, and prevention of tuberculosis infection.

L6 ANSWER 23 OF 50 USPATFULL on STN  
AN 2004:78909 USPATFULL  
TI Non-stochastic generation of genetic vaccines and enzymes  
IN Short, Jay M., Rancho Santa Fe, CA, United States  
PA Diversa Corporation, San Diego, CA, United States (U.S. corporation)  
PI US 6713279 B1 20040330  
AI US 2000-498557 20000204 (9)  
RLI Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, now patented, Pat. No. US 6479253 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, now patented, Pat. No. US 6537776 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, now patented, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, now patented, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, now patented, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250  
PRAI US 1995-8311P 19951207 (60)  
US 1995-8316P 19951207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Park, Hankyel T.  
LREP Love, Jane M., Butler, James E.  
CLMN Number of Claims: 105  
ECL Exemplary Claim: 1  
DRWN 73 Drawing Figure(s); 64 Drawing Page(s)  
LN.CNT 19098

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, genetic vaccines, enzymes, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological

properties. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

L6 ANSWER 24 OF 50 USPATFULL on STN  
AN 2004:76621 USPATFULL  
TI Assay to determine efficacy of treatment for \*\*\*mycobacterial\*\*\* infection  
IN Lalvani, Ajit, John Radcliffe Hospital Headington, UNITED KINGDOM  
PI US 2004058399 A1 20040325  
AI US 2003-451918 A1 20031023 (10)  
WO 2002-GB55 20020108  
PRAI GB 2001-432 20010108  
DT Utility  
FS APPLICATION  
LREP Nixon & Vanderhye, 8th Floor, 1100 North Glebe Road, Arlington, VA, 22201-4714  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 1601  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Method of determining the efficacy of treatment for \*\*\*mycobacterial\*\*\* infection in an individual comprising determining in samples from the individual whether the level of \*\*\*T\*\*\* \*\*\*cells\*\*\* specific for a \*\*\*mycobacterial\*\*\* antigen has decreased after the treatment, thereby determining the efficacy of the treatment.

L6 ANSWER 25 OF 50 USPATFULL on STN  
AN 2004:76186 USPATFULL  
TI Therapeutic TB vaccine  
IN Andersen, Peter, Bronshoj, DENMARK  
Rosenkrands, Ida, Vaerlose, DENMARK  
Stryhn, Anette, Virum, DENMARK  
PI US 2004057963 A1 20040325  
AI US 2003-617038 A1 20030711 (10)  
PRAI DK 2002-1098 20020713  
US 2002-401725P 20020807 (60)  
DT Utility  
FS APPLICATION  
LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 6018  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Therapeutic vaccines comprising polypeptides expressed during the latent stage of \*\*\*mycobacteria\*\*\* infection are provided, as are multiphase vaccines, and methods for treating and preventing tuberculosis.

L6 ANSWER 26 OF 50 USPATFULL on STN  
AN 2004:24343 USPATFULL  
TI Stimulation of thymus for vaccination development  
IN Boyd, Richard Lennox, Hampton, AUSTRALIA

PA Monash University (non-U.S. corporation)  
PI US 2004018180 A1 20040129  
AI US 2003-418747 A1 20030418 (10)  
RLI Continuation-in-part of Ser. No. US 2001-977479, filed on 12 Oct 2001,  
PENDING Continuation-in-part of Ser. No. US 2001-965394, filed on 26 Sep  
2001, ABANDONED Continuation-in-part of Ser. No. US 2001-755965, filed  
on 5 Jan 2001, ABANDONED Continuation-in-part of Ser. No. US  
2000-795286, filed on 13 Oct 2000, ABANDONED Continuation-in-part of  
Ser. No. US 2000-795302, filed on 13 Oct 2000, ABANDONED  
PRAI AU 2000-745 20001013  
AU 1999-9778 19990415  
WO 2000-AU329 20000417

DT Utility

FS APPLICATION

LREP HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 45 Drawing Page(s)

LN.CNT 4303

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present disclosure provides methods for enhancing the response of a patient's immune system to vaccination. This is accomplished by reactivating the thymus. Optionally, hematopoietic stem cells, autologous, syngeneic, allogeneic or xenogeneic, are delivered to increase the speed of regeneration of the patient's immune system. In one embodiment the hematopoietic stem cells are CD34.sup.+ . The patient's thymus is reactivated by disruption of sex steroid mediated signaling to the thymus. In one embodiment, this disruption is created by administration of LHRH agonists, LHRH antagonists, anti-LHRH receptor antibodies, anti-LHRH vaccines or combinations thereof.

L6 ANSWER 27 OF 50 USPATFULL on STN

AN 2004:24340 USPATFULL

TI Vaccination method

IN Hill, Adrian V.S., Oxford, UNITED KINGDOM

McShane, Helen, Oxford, UNITED KINGDOM

Gilbert, Sarah, Oxford, UNITED KINGDOM

Schneider, Joerg, Oxford, UNITED KINGDOM

PI US 2004018177 A1 20040129

AI US 2003-345000 A1 20030715 (10)

WO 2001-GB4116 20010913

PRAI GB 2000-232033 20000921

DT Utility

FS APPLICATION

LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA,  
22201-4714

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

LN.CNT 1531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is provided a method of inducing a CD4+ \*\*\*T\*\*\* - \*\*\*cell\*\*\*  
response against a target antigen, by administering a composition a  
source of one or more CD4+ epitopes is a non-replicating or replication  
impaired recombinant poxvirus vector.

L6 ANSWER 28 OF 50 USPATFULL on STN

AN 2004:4297 USPATFULL  
TI Tuberculosis vaccine  
IN Kaufmann, Stefan H. E., Berlin, GERMANY, FEDERAL REPUBLIC OF  
Hess, Jurgen, Berlin, GERMANY, FEDERAL REPUBLIC OF  
PA Max-Planck-Gesellschaft zur Forderung der Wissenschaften e.V., GERMANY,  
FEDERAL REPUBLIC OF (non-U.S. corporation)  
PI US 6673353 B1 20040106  
WO 9910496 19990304  
AI US 2000-485717 20000222 (9)  
WO 1998-EP5109 19980812  
PRAI EP 1997-114614 19970822  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Swartz, Rodney P  
LREP Rothwell, Figg, Ernst & Manbeck  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Figure(s); 6 Drawing Page(s)  
LN.CNT 1137  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to novel recombinant vaccines providing protective immunity against tuberculosis. Further, the present invention refers to novel recombinant nucleic acid molecules, vectors containing said nucleic acid molecules, cells transformed with said nucleic acid molecules and polypeptides encoded by said nucleic acid molecules.

L6 ANSWER 29 OF 50 USPATFULL on STN  
AN 2004:1847 USPATFULL  
TI Attenuated \*\*\*mycobacterium\*\*\* tuberculosis vaccines  
IN Jacobs, William R., Pelham, NY, UNITED STATES  
Hsu, Tsungda, Bronx, NY, UNITED STATES  
Bardarov, Stoyan, Bronx, NY, UNITED STATES  
Sambandamurthy, Vasan, Worcester, MA, UNITED STATES LR  
PI US 2004001866 A1 20040101  
AI US 2003-351452 A1 20030124 (10)  
PRAI US 2002-358152P 20020219 (60)  
DT Utility  
FS APPLICATION  
LREP Elie H. Gendloff, Craig J. Arnold, Alan D. Miller, Amster, Rothstein & Ebenstein, 90 Park Avenue, New York, NY, 10016  
CLMN Number of Claims: 125  
ECL Exemplary Claim: 1  
DRWN 22 Drawing Page(s)  
LN.CNT 3313  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Non-naturally occurring \*\*\*mycobacteria\*\*\* in the \*\*\*Mycobacterium\*\*\* tuberculosis complex are provided. These \*\*\*mycobacteria\*\*\* have a deletion of an RD1 region or a region controlling production of a vitamin, and exhibit attenuated virulence in a mammal when compared to the. \*\*\*mycobacteria\*\*\* without the deletion. Also provided are non-naturally occurring \*\*\*mycobacteria\*\*\* that have a deletion of a region controlling production of lysine, and \*\*\*mycobacteria\*\*\* comprising two attenuating deletions. Vaccines comprising these \*\*\*mycobacteria\*\*\* are also provided, as are methods of protecting mammals from virulent \*\*\*mycobacteria\*\*\* using the vaccines. Also provided are methods of preparing these vaccines which include the step of deleting an RD1 region or a region controlling

production of a vitamin from a \*\*\*mycobacterium\*\*\* in the M. tuberculosis complex.

L6 ANSWER 30 OF 50 USPATFULL on STN  
AN 2004:1830 USPATFULL  
TI Antigen library immunization  
IN Punnonen, Juha, Belmont, CA, UNITED STATES  
Bass, Steven H., Hillsborough, CA, UNITED STATES  
Whalen, Robert Gerald, Foster City, CA, UNITED STATES  
Howard, Russell, Los Altos Hills, CA, UNITED STATES  
Stemmer, Willem P.C., Los Gatos, CA, UNITED STATES  
PA Maxygen, Inc., a Delaware corporation (U.S. corporation)  
PI US 2004001849 A1 20040101  
AI US 2003-383317 A1 20030307 (10)  
RLI Continuation of Ser. No. US 2000-724852, filed on 28 Nov 2000, GRANTED,  
Pat. No. US 6576757 Continuation of Ser. No. US 1999-247890, filed on 10  
Feb 1999, GRANTED, Pat. No. US 6541011  
PRAI US 1998-105509P 19981023 (60)  
US 1998-74294P 19980211 (60)  
DT Utility  
FS APPLICATION  
LREP MAXYGEN, INC., INTELLECTUAL PROPERTY DEPARTMENT, 515 GALVESTON DRIVE,  
RED WOOD CITY, CA, 94063  
CLMN Number of Claims: 53  
ECL Exemplary Claim: 1  
DRWN 21 Drawing Page(s)  
LN.CNT 5367  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention is directed to antigen library immunization, which provides methods for obtaining antigens having improved properties for therapeutic and other uses. The methods are useful for obtaining improved antigens that can induce an immune response against pathogens, cancer, and other conditions, as well as antigens that are effective in modulating allergy, inflammatory and autoimmune diseases.

L6 ANSWER 31 OF 50 USPATFULL on STN  
AN 2003:318279 USPATFULL  
TI Methods of using epitope peptides of human pathogens  
IN Conti-Fine, Bianca M., Minneapolis, MN, UNITED STATES  
PA Regents of the University of Minnesota (U.S. corporation)  
PI US 2003224021 A1 20031204  
AI US 2003-356765 A1 20030130 (10)  
RLI Continuation of Ser. No. US 1998-199748, filed on 25 Nov 1998, ABANDONED  
DT Utility  
FS APPLICATION  
LREP SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINNEAPOLIS,  
MN, 55402  
CLMN Number of Claims: 67  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Page(s)  
LN.CNT 2599  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Isolated and purified \*\*\*T\*\*\* \*\*\*cell\*\*\* epitope peptides and variants thereof, useful to immunize a mammal, e.g., a human, against an infectious pathogen are provided. Also provided are methods to identify and use the peptides.

L6 ANSWER 32 OF 50 USPATFULL on STN  
AN 2003:312155 USPATFULL  
TI Novel antigen binding molecules for therapeutic, diagnostic, prophylactic, enzymatic, industrial, and agricultural applications, and methods for generating and screening thereof  
IN Short, Jay M., Rancho Santa Fe, CA, UNITED STATES  
PA Diversa Corporation, San Diego, CA, UNITED STATES, 92121 (U.S. corporation)  
PI US 2003219752 A1 20031127  
AI US 2002-151469 A1 20020517 (10)  
RLI Continuation-in-part of Ser. No. US 2000-535754, filed on 27 Mar 2000, GRANTED, Pat. No. US 6361974 Continuation-in-part of Ser. No. US 2000-522289, filed on 9 Mar 2000, GRANTED, Pat. No. US 6358709 Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 Continuation-in-part of Ser. No. WO 2000-US16838, filed on 14 Jun 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US8245, filed on 27 Mar 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US6497, filed on 9 Mar 2000, PENDING Continuation-in-part of Ser. No. US 2000-594459, filed on 14 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, GRANTED, Pat. No. US 6537776 Continuation-in-part of Ser. No. WO 2000-US3086, filed on 4 Feb 2000, PENDING Continuation-in-part of Ser. No. US 2001-756459, filed on 8 Jan 2001, PENDING Continuation of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1999-376727, filed on 17 Aug 1999, GRANTED, Pat. No. US 6440668 Continuation of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 Continuation-in-part of Ser. No. WO 1998-US22596, filed on 23 Oct 1998, PENDING Continuation-in-part of Ser. No. US 1999-214645, filed on 27 Sep 1999, PENDING A 371 of International Ser. No. WO 1997-US12239, filed on 9 Jul 1997, PENDING Continuation-in-part of Ser. No. US 2001-790321, filed on 21 Feb 2001, PENDING Division of Ser. No. US 2000-687219, filed on 12 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-636778, filed on 11 Aug 2000, PENDING Continuation of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 2001-876276, filed on 7 Jun 2001, GRANTED, Pat. No. US 6468724 Continuation-in-part of Ser. No. US 2001-761559, filed on 16 Jan 2001, PENDING Division of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997, PENDING Continuation-in-part of Ser. No. US 2001-848185, filed on 3 May 2001, PENDING Division of Ser. No. US 2000-636778, filed on 11 Aug 2000, PENDING Continuation of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997,

PENDING Continuation-in-part of Ser. No. US 2000-738871, filed on 15 Dec 2000, PENDING Continuation-in-part of Ser. No. US 2000-685432, filed on 10 Oct 2000, PENDING Continuation-in-part of Ser. No. US 1999-444112, filed on 22 Nov 1999, PENDING Continuation-in-part of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997, PENDING Continuation-in-part of Ser. No. WO 2000-US32208, filed on 22 Nov 2000, PENDING Continuation-in-part of Ser. No. WO 1998-US12674, filed on 16 Jun 1998, PENDING

PRAI US 2001-300381P 20010517 (60)  
US 2001-300907P 20010625 (60)  
US 1995-8311P 19951207 (60)  
US 1995-8316P 19951207 (60)  
US 1995-8311P 19951207 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON, PC, 4350 LA JOLLA VILLAGE DRIVE, SUITE 500, SAN DIEGO, CA, 92122

CLMN Number of Claims: 102

ECL Exemplary Claim: 1

DRWN 95 Drawing Page(s)

LN.CNT 23775

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to methods for generating sets, or libraries, of nucleic acids encoding antigen-binding sites, such as antibodies, antibody domains or other fragments, including single and double stranded antibodies, major histocompatibility complex (MHC) molecules, \*\*\*T\*\*\* \*\*\*cell\*\*\* receptors (TCRs), and the like. This invention provides methods for generating variant antigen binding sites, e.g., antibodies and specific domains or fragments of antibodies (e.g., Fab or Fc domains), by altering template nucleic acids including by saturation mutagenesis, synthetic ligation reassembly, or a combination thereof. In one aspect, invention provides methods for generating all human or humanized antibodies and evolving them to achieve optimized properties related to stability, duration, expression, production, enzymatic activity, affinity, avidity, localization, and other immunological properties. Polypeptides generated by these methods can be analyzed using a novel capillary array platform, which provides unprecedented ultra-high throughput screening.

L6 ANSWER 33 OF 50 USPATFULL on STN

AN 2003:300802 USPATFULL

TI Immunomodulatory polynucleotides in treatment of an infection by an intracellular pathogen

IN Raz, Eyal, Del Mar, CA, UNITED STATES

Kornbluth, Richard, La Jolla, CA, UNITED STATES

Catanzaro, Antonino, San Diego, CA, UNITED STATES

Hayashi, Tomoko, San Diego, CA, UNITED STATES

Carson, Dennis, Del Mar, CA, UNITED STATES

PI US 2003212028 A1 20031113

AI US 2003-353917 A1 20030128 (10)

RLI Continuation of Ser. No. US 2001-774403, filed on 30 Jan 2001, GRANTED, Pat. No. US 6552006

PRAI US 2000-179353P 20000131 (60)

DT Utility

FS APPLICATION

LREP BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO

PARK, CA, 94025  
CLMN Number of Claims: 51  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 2075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention features methods for treatment or prevention of infection by intracellular pathogens (e.g., \*\*\*Mycobacterium\*\*\* species) by administration of an immunomodulatory nucleic acid molecule. In one embodiment, immunomodulatory nucleic acid molecule are administered in combination with another anti-pathogenic agent to provide a synergistic anti-pathogenic effect.

L6 ANSWER 34 OF 50 USPATFULL on STN  
AN 2003:294272 USPATFULL  
TI Non-stochastic generation of genetic vaccines  
IN Short, Jay M., Rancho Santa Fe, CA, UNITED STATES  
PI US 2003207287 A1 20031106  
AI US 2002-223507 A1 20020819 (10)  
RLI Continuation of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408  
PRAI US 1995-8311P 19951207 (60)  
US 1995-8316P 19951207 (60)  
DT Utility  
FS APPLICATION  
LREP HALE AND DORR LLP, 300 PARK AVENUE, NEW YORK, NY, 10022  
CLMN Number of Claims: 69  
ECL Exemplary Claim: 1  
DRWN 61 Drawing Page(s)  
LN.CNT 20997

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

L6 ANSWER 35 OF 50 USPATFULL on STN  
AN 2003:250508 USPATFULL  
TI Heterologous fusion protein constructs comprising a Leishmania antigen  
IN Skeiky, Yasir, Bellevue, WA, UNITED STATES  
Brannon, Mark, Seattle, WA, UNITED STATES  
Guderian, Jeffrey, Lynwood, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)

PI US 2003175294 A1 20030918  
AI US 2002-98732 A1 20020313 (10)  
PRAI US 2001-275837P 20010313 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 82

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 6952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a recombinant nucleic acid molecule encoding a fusion polypeptide, wherein the recombinant nucleic acid comprises a heterologous polynucleotide sequence encoding an antigen or an antigenic fragment, and a Leishmania polynucleotide sequence encoding a polypeptide or fragment thereof, wherein the Leishmania polynucleotide is selected from the group consisting of TSA polynucleotide, LeIF polynucleotide, M15 polynucleotide, and 6H polynucleotide. The invention also provides an expression cassette comprising the recombinant nucleic acid molecule, host cells comprising the expression cassette, compositions, fusion polypeptides, and methods of their use in diagnosis or in generating a protective immune response in hosts.

L6 ANSWER 36 OF 50 USPATFULL on STN

AN 2003:232060 USPATFULL

TI Vaccine adjuvant

IN Minion, F. Chris, Ames, IA, UNITED STATES

Menon, Sreekumar A., Philadelphia, PA, UNITED STATES

Mahairas, Gregory G., Seattle, WA, UNITED STATES

PA Iowa State University Research Foundation, Inc., an Iowa corporation (U.S. corporation)

PI US 2003162260 A1 20030828

AI US 2003-384948 A1 20030310 (10)

RLI Division of Ser. No. US 2000-692064, filed on 19 Oct 2000, GRANTED, Pat. No. US 6537552

PRAI US 1999-160249P 19991019 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 1632

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention features fusion agents such as fusion proteins that are useful for the treatment of and prevention from diseases that are susceptible to the effects of cellular (Th1 type) immune responses. Also encompassed by the invention are nucleic acids encoding the fusion proteins of the invention, vectors containing the nucleic acids, and cells containing the vectors. The invention includes methods of making and using the fusion agents of the invention.

L6 ANSWER 37 OF 50 USPATFULL on STN

AN 2003:200470 USPATFULL

TI Vaccination method

IN Hill, Adrian V. S., Oxford, UNITED KINGDOM  
McShane, Helen, Oxford, UNITED KINGDOM  
Gilbert, Sarah C., Oxford, UNITED KINGDOM  
Reece, William, Newtown, AUSTRALIA  
Schneider, Joerg, Barton, UNITED KINGDOM  
PA Oxxon Pharmaccines, Ltd., Littlemore, UNITED KINGDOM (non-U.S.  
corporation)  
PI US 2003138454 A1 20030724  
AI US 2002-79167 A1 20020219 (10)  
RLI Continuation-in-part of Ser. No. US 1999-454204, filed on 9 Dec 1999,  
PENDING Continuation of Ser. No. WO 1998-GB1681, filed on 9 Jun 1998,  
UNKNOWN Continuation-in-part of Ser. No. WO 2001-GB4116, filed on 13 Sep  
2001, UNKNOWN  
PRAI GB 1997-11957 19970609  
GB 2000-23203 20000921  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 68  
ECL Exemplary Claim: 1  
DRWN 30 Drawing Page(s)  
LN.CNT 4443  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB New methods and reagents for vaccination are described which generate a  
\*\*\*CD8\*\*\* \*\*\*T\*\*\* \*\*\*cell\*\*\* immune response against malarial  
and other antigens such as viral and tumour antigens. Novel vaccination  
regimes are described which employ a priming composition and a boosting  
composition, the boosting composition comprising a non-replicating or  
replication-impaired pox virus vector carrying at least one \*\*\*CD8\*\*\*  
\*\*\*T\*\*\* \*\*\*cell\*\*\* epitope which is also present in the priming  
composition. There is also provided a method of inducing a CD4+  
\*\*\*T\*\*\* - \*\*\*cell\*\*\* response against a target antigen, by  
administering a composition comprising a source of one or more CD4+  
\*\*\*T\*\*\* \*\*\*cell\*\*\* epitopes of the target antigen wherein the  
source of CD4+ epitopes is a non-replicating or replication impaired  
recombinant poxvirus vector. A method of inducing a combined CD4+ and  
\*\*\*CD8\*\*\* + \*\*\*T\*\*\* \*\*\*cell\*\*\* response against a target  
antigen is also described herein.

L6 ANSWER 38 OF 50 USPATFULL on STN  
AN 2003:155723 USPATFULL  
TI Polynucleotides encoding flavivirus and alphavirus multivalent antigenic  
polypeptides  
IN Punnonen, Juha, Palo Alto, CA, United States  
Bass, Steven H., Hillsborough, CA, United States  
Whalen, Robert Gerald, Paris, FRANCE  
Howard, Russell, Los Altos Hills, CA, United States  
Stemmer, Willem P. C., Los Gatos, CA, United States  
PA Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)  
PI US 6576757 B1 20030610  
AI US 2000-724852 20001128 (9)  
RLI Continuation of Ser. No. US 1999-247890, filed on 10 Feb 1999  
PRAI US 1998-105509P 19981023 (60)  
US 1998-74294P 19980211 (60)  
DT Utility  
FS GRANTED

EXNAM Primary Examiner: Park, Hankyel T.; Assistant Examiner: Brown, Stacy S.  
LREP Powers, Margaret A., Kruse, Norman J., Quine Intellectual Property Law  
Group, P.C.

CLMN Number of Claims: 54

ECL Exemplary Claim: 1

DRWN 27 Drawing Figure(s); 23 Drawing Page(s)

LN.CNT 6384

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to antigen library immunization, which provides methods for obtaining antigens having improved properties for therapeutic and other uses. The methods are useful for obtaining improved antigens that can induce an immune response against pathogens, cancer, and other conditions, as well as antigens that are effective in modulating allergy, inflammatory and autoimmune diseases.

L6 ANSWER 39 OF 50 USPATFULL on STN

AN 2003:152969 USPATFULL

TI Screening methods

IN Jakobsen, Bent Karsten, Wantage, UNITED KINGDOM

PA AVIDEX LIMITED, Milton, UNITED KINGDOM (non-U.S. corporation)

PI US 2003104635 A1 20030605

AI US 2002-188444 A1 20020702 (10)

RLI Continuation-in-part of Ser. No. US 2002-103597, filed on 21 Mar 2002,  
PENDING Continuation of Ser. No. WO 2000-GB3579, filed on 18 Sep 2000,  
UNKNOWN

PRAI GB 1999-22352 19990921

DT Utility

FS APPLICATION

LREP HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 23 Drawing Page(s)

LN.CNT 2609

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for sequentially screening for compounds with the potential to interfere with low affinity receptor-ligand contacts using an interfacial optical assay, such as surface plasmon resonance (SPR). The method comprises contacting a candidate compound with an immobilized receptor, contacting the receptor, which may or may not have the candidate compound bound to it, with the ligand and detecting by interfacial optical assay whether or not the ligand or ligand-compound complex has bound to the receptor or receptor-compound complex. If the ligand binds, the method shows that the compound does not inhibit the receptor-ligand interaction. If the ligand does not bind, the method shows that the compound inhibits the receptor-ligand interaction. The method is particularly useful for screening for inhibitors of the interaction between MHC/peptide complex and \*\*\*T\*\*\* \*\*\*cell\*\*\* receptor, MHC/peptide complex and \*\*\*CD8\*\*\* coreceptor or MHC/peptide complex and CD4 coreceptor.

L6 ANSWER 40 OF 50 USPATFULL on STN

AN 2003:142838 USPATFULL

TI Flavivirus and alphavirus recombinant antigen libraries

IN Punningen, Juha, Palo Alto, CA, United States

Bass, Steven H., Hillsborough, CA, United States

Whalen, Robert Gerald, Paris, FRANCE

Howard, Russell, Los Altos Hills, CA, United States

PA Stemmer, Willem P. C., Los Gatos, CA, United States  
Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)  
PI US 6569435 B1 20030527  
AI US 2000-724969 20001128 (9)  
RLI Continuation of Ser. No. US 1999-247890, filed on 10 Feb 1999  
PRAI US 1998-105509P 19981023 (60)  
US 1998-74294P 19980211 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Park, Hankyel T.; Assistant Examiner: Brown, Stacy S.  
LREP Powers, Margaret A., Kruse, Norman J., Quine Intellectual Property Law  
Group, P.C.  
CLMN Number of Claims: 51  
ECL Exemplary Claim: 1  
DRWN 27 Drawing Figure(s); 23 Drawing Page(s)  
LN.CNT 6559  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to antigen library immunization, which provides methods for obtaining antigens having improved properties for therapeutic and other uses. The methods are useful for obtaining improved antigens that can induce an immune response against pathogens, cancer, and other conditions, as well as antigens that are effective in modulating allergy, inflammatory and autoimmune diseases.

L6 ANSWER 41 OF 50 USPATFULL on STN  
AN 2003:140591 USPATFULL  
TI Screening methods  
IN Jakobsen, Bent Karsten, Wantage, UNITED KINGDOM  
PA AVIDEX LIMITED, Milton, UNITED KINGDOM, OX 14 4RX  
PI US 2003096432 A1 20030522  
AI US 2002-103597 A1 20020321 (10)  
RLI Continuation of Ser. No. WO 2000-GB3579, filed on 18 Sep 2000, UNKNOWN  
PRAI GB 1999-22352 19990921  
DT Utility  
FS APPLICATION  
LREP HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 2234  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for sequentially screening for compounds with the potential to interfere with low affinity receptor-ligand contacts using an interfacial optical assay, such as surface plasmon resonance (SPR). The method comprises contacting a candidate compound with an immobilised receptor, contacting the receptor, which may or may not have the candidate compound bound to it, with the ligand and detecting by interfacial optical assay whether or not the ligand or ligand-compound complex has bound to the receptor or receptor-compound complex. If the ligand binds, the method shows that the compound does not inhibit the receptor-ligand interaction. If the ligand does not bind, the method shows that the compound inhibits the receptor-ligand interaction. The method is particularly usefull for screening for inhibitors of the interaction between MHC/peptide complex and \*\*\*T\*\*\* \*\*\*cell\*\*\* receptor, MHC/peptide complex and \*\*\*CD8\*\*\* coreceptor or MHC/peptide complex and CD4 coreceptor.

L6 ANSWER 42 OF 50 USPATFULL on STN  
AN 2003:81455 USPATFULL  
TI Vaccine adjuvant  
IN Minion, F. Chris, Ames, IA, United States  
Menon, Sreekumar A., Philadelphia, PA, United States  
Mahairas, Gregory G., Seattle, WA, United States  
PA Iowa State University Research Foundation, Ames, IA, United States (U.S.  
corporation)  
PI US 6537552 B1 20030325  
AI US 2000-692064 20001019 (9)  
PRAI US 1999-160429P 19991019 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Smith, Lynette R. F.; Assistant Examiner:  
Shahnan-Shah, Khatol S  
LREP Fish & Richardson P.C.  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Figure(s); 7 Drawing Page(s)  
LN.CNT 1611  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention features fusion agents such as fusion proteins that are useful for the treatment of and prevention from diseases that are susceptible to the effects of cellular (Th1 type) immune responses. Also encompassed by the invention are nucleic acids encoding the fusion proteins of the invention, vectors containing the nucleic acids, and cells containing the vectors. The invention includes methods of making and using the fusion agents of the invention.

L6 ANSWER 43 OF 50 USPATFULL on STN  
AN 2003:51224 USPATFULL  
TI Peptide extended glycosylated polypeptides  
IN Okkels, Jens Sigurd, Vedbaek, DENMARK  
Jensen, Anne Dam, Copenhagen, DENMARK  
van den Hazel, Bart, Copenhagen, DENMARK  
PI US 2003036181 A1 20030220  
AI US 2001-896896 A1 20010629 (9)  
PRAI DK 2000-1027 20000630  
DK 2000-1092 20000714  
WO 2000-DK743 20001229  
WO 2001-DK90 20010209  
US 2000-217497P 20000711 (60)  
US 2000-225558P 20000816 (60)  
DT Utility  
FS APPLICATION  
LREP MAXYGEN, INC., 515 GALVESTON DRIVE, RED WOOD CITY, CA, 94063  
CLMN Number of Claims: 57  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 4732  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Glycosylated polypeptides comprising the primary structure NH<sub>sub</sub>.2--X--Pp--COOH, wherein X is a peptide addition comprising or contributing to a glycosylation site, and Pp is a polypeptide of interest or comprising the primary structure NH<sub>sub</sub>.2-P<sub>sub</sub>.x--X--P<sub>sub</sub>.y-COOH, wherein P<sub>sub</sub>.x is an N-terminal part of a polypeptide Pp of interest, P<sub>sub</sub>.y is a C-terminal part of said polypeptide Pp, and X

is a peptide addition comprising or contributing to a glycosylation site are provided. The glycosylated polypeptides possess improved properties as compared to the polypeptide of interest.

L6 ANSWER 44 OF 50 USPATFULL on STN  
AN 2003:38127 USPATFULL  
TI TUBERCULOSIS ANTIGENS AND METHODS OF USE THEREFOR  
IN HENDRICKSON, RONALD C., SEATTLE, WA, UNITED STATES  
LODES, MICHAEL J., SEATTLE, WA, UNITED STATES  
HOUGHTON, RAYMOND L., BOTHELL, WA, UNITED STATES  
PI US 2003027774 A1 20030206  
AI US 1999-272975 A1 19990318 (9)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 151  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Page(s)  
LN.CNT 2540  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compounds and methods for the diagnosis and treatment of tuberculosis are disclosed. Compounds include the *M. tuberculosis* antigens Mtb-81 and Mtb-67.2, immunogenic portions thereof and polynucleotides that encode such portions. Such compositions may be used, for example, for the immunotherapy and serodiagnosis of *M. tuberculosis* infection.

L6 ANSWER 45 OF 50 USPATFULL on STN  
AN 2002:344432 USPATFULL  
TI ANTIGEN LIBRARY IMMUNIZATION  
IN PUNNONEN, JUHA, PALO ALTO, CA, UNITED STATES  
BASS, STEVEN H., HILLSBOROUGH, CA, UNITED STATES  
WHALEN, ROBERT GERALD, PARIS, FRANCE  
HOWARD, RUSSELL, LOS ALTOS HILLS, CA, UNITED STATES  
STEMMER, WILLEM P. C., LOS GATOS, CA, UNITED STATES  
PI US 2002198162 A1 20021226  
US 6541011 B2 20030401  
AI US 1999-247890 A1 19990210 (9)  
PRAI US 1998-74294P 19980211 (60)  
US 1998-105509P 19981023 (60)  
DT Utility  
FS APPLICATION  
LREP MAXYGEN, INC., 515 GALVESTON DRIVE, RED WOOD CITY, CA, 94063  
CLMN Number of Claims: 53  
ECL Exemplary Claim: 1  
DRWN 21 Drawing Page(s)  
LN.CNT 5366  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention is directed to antigen library immunization, which provides methods for obtaining antigens having improved properties for therapeutic and other uses. The methods are useful for obtaining improved antigens that can induce an immune response against pathogens, cancer, and other conditions, as well as antigens that are effective in modulating allergy, inflammatory and autoimmune diseases.

L6 ANSWER 46 OF 50 USPATFULL on STN  
AN 2002:297432 USPATFULL

TI Non-stochastic generation of genetic vaccines  
IN Short, Jay M., Rancho Santa Fe, CA, United States  
PA Diversa Corporation, San Diego, CA, United States (U.S. corporation)  
PI US 6479258 B1 20021112  
AI US 2000-495052 20000131 (9)  
RLI Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999  
Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999,  
now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US  
1998-185373, filed on 3 Nov 1998 Continuation-in-part of Ser. No. US  
1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696  
PRAI US 1995-8311P 19951207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Park, Hankyel T.  
LREP Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.  
CLMN Number of Claims: 86  
ECL Exemplary Claim: 1  
DRWN 66 Drawing Figure(s); 61 Drawing Page(s)  
LN.CNT 19213  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention provides methods of obtaining vaccines by use of  
non-stochastic methods of directed evolution (DirectEvolution.TM.).  
These methods include non-stochastic polynucleotide site-saturation  
mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic  
polynucleotide reassembly (GeneReassembly.TM.). Through use of the  
claimed methods, vectors can be obtained which exhibit increased  
efficacy for use as genetic vaccines. Vectors obtained by using the  
methods can have, for example, enhanced antigen expression, increased  
uptake into a cell, increased stability in a cell, ability to tailor an  
immune response, and the like.

L6 ANSWER 47 OF 50 USPATFULL on STN  
AN 2002:185292 USPATFULL  
TI Compounds and methods for diagnosis and immunotherapy of tuberculosis  
IN Campos-Neto, Antonio, Bainbridge Island, WA, UNITED STATES  
Skeiky, Yasir, Seattle, WA, UNITED STATES  
Ovendale, Pamela, Everett, WA, UNITED STATES  
Jen, Shyian, Seattle, WA, UNITED STATES  
Lodes, Michael, Seattle, WA, UNITED STATES  
PI US 2002098200 A1 20020725  
AI US 2001-793306 A1 20010226 (9)  
PRAI US 2000-223828P 20000808 (60)  
US 2000-185037P 20000225 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH  
FLOOR, SAN FRANCISCO, CA, 94111-3834  
CLMN Number of Claims: 51  
ECL Exemplary Claim: 1  
DRWN 18 Drawing Page(s)  
LN.CNT 6182  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds and methods for diagnosing tuberculosis or for inducing  
protective immunity against tuberculosis are disclosed. The compounds  
provided include polypeptides that contain at least one immunogenic  
portion of one or more \*\*\*Mycobacterium\*\*\* proteins and DNA  
molecules encoding such polypeptides. Diagnostic kits containing such

polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of \*\*\*Mycobacterium\*\*\* infection in patients and biological samples. Antibodies directed against such polypeptides are also provided. In addition, such compounds may be formulated into vaccines and/or pharmaceutical compositions for immunization against \*\*\*Mycobacterium\*\*\* infection.

L6 ANSWER 48 OF 50 USPATFULL on STN  
AN 2002:164677 USPATFULL  
TI Immunomodulatory polynucleotides in treatment of an infection by an intracellular pathogen  
IN Raz, Eyal, Del Mar, CA, UNITED STATES  
Kornbluth, Richard, La Jolla, CA, UNITED STATES  
Catanzaro, Antonino, San Diego, CA, UNITED STATES  
Hayashi, Tomoko, San Diego, CA, UNITED STATES  
Carson, Dennis, Del Mar, CA, UNITED STATES  
PI US 2002086295 A1 20020704  
US 6552006 B2 20030422  
AI US 2001-774403 A1 20010130 (9)  
PRAI US 2000-179353P 20000131 (60)  
DT Utility  
FS APPLICATION  
LREP Carol L. Francis, BOZICEVIC, FIELD & FRANCIS LLP, Suite 200, 200 Middlefield Road, Menlo Park, CA, 94025  
CLMN Number of Claims: 51  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 2100  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention features methods for treatment or prevention of infection by intracellular pathogens (e.g., \*\*\*Mycobacterium\*\*\* species) by administration of an immunomodulatory nucleic acid molecule. In one embodiment, immunomodulatory nucleic acid molecule are administered in combination with another anti-pathogenic agent to provide a synergistic anti-pathogenic effect.

L6 ANSWER 49 OF 50 USPATFULL on STN  
AN 2002:54999 USPATFULL  
TI POLYNUCLEOTIDE TUBERCULOSIS VACCINE  
IN CONTENT, JEAN, RHODE-SAINT-GENESE, BELGIUM  
HUYGEN, KRIS, BRUSSELS, BELGIUM  
LIU, MARGARET A., ROSEMONT, PA, UNITED STATES  
MONTGOMERY, DONNA, CHALFONT, PA, UNITED STATES  
ULMER, JEFFREY, CHALFONT, PA, UNITED STATES  
PI US 2002032162 A1 20020314  
US 6384018 B2 20020507  
AI US 1998-10733 A1 19980122 (9)  
RLI Division of Ser. No. US 1994-338992, filed on 14 Nov 1994, GRANTED, Pat. No. US 5736524  
DT Utility  
FS APPLICATION  
LREP JOHN W WALLEN III, MERCK & CO INC, PATENT DEPT, P O BOX 2000, RAHWAY, NJ, 070650907  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 20 Drawing Page(s)  
LN.CNT 1205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding \*\*\*Mycobacterium\*\*\* tuberculosis (M.tb) proteins were cloned into eukaryotic expression vectors to express the encoded proteins in mammalian muscle cells in vivo. Animals were immunized by injection of these DNA constructs, termed polynucleotide vaccines or PNV, into their muscles. Immune antisera was produced against M.tb antigens. Specific \*\*\*T\*\*\* - \*\*\*cell\*\*\* responses were detected in spleen cells of vaccinated mice and the profile of \*\*\*cytokine\*\*\* secretion in response to antigen 85 was indicative of a T.sub.h1 type of helper \*\*\*T\*\*\* - \*\*\*cell\*\*\* response (i.e., high IL-2 and IFN-.gamma.). Protective efficacy of an M.tb DNA vaccine was demonstrated in mice after challenge with M.bovis BCG, as measured by a reduction in \*\*\*mycobacterial\*\*\* multiplication in the spleens and lungs of M.tb DNA-vaccinated mice compared to control DNA-vaccinated mice or primary infection in naive mice.

L6 ANSWER 50 OF 50 USPATFULL on STN

AN 1998:36732 USPATFULL

TI Polynucleotide tuberculosis vaccine

IN Content, Jean, Rhode-Saint-Genese, Belgium

Huygen, Kris, Brussels, Belgium

Liu, Margaret A., Rosemont, PA, United States  
Montgomery, Donna, Chalfont, PA, United States

Ulmer, Jeffrey, Chalfont, PA, United States

PA Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)  
N. V. Innogenetics S.A., Ghent, Belgium (non-U.S. corporation)

PI US 5736524 19980407

AI US 1994-338992 19941114 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Chambers, Jasemine C.; Assistant Examiner: Hauda, Karen M.

LREP Yablonsky, Michael D., Tribble, Jack L.

CLMN Number of Claims: 17

ECL Exemplary Claim: 1,11

DRWN 22 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 1346

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding \*\*\*Mycobacterium\*\*\* tuberculosis (M.tb) proteins were cloned into eukaryotic expression vectors to express the encoded proteins in mammalian muscle cells in vivo. Animals were immunized by injection of these DNA constructs, termed polynucleotide vaccines or PNV, into their muscles. Immune antisera was produced against M.tb antigens. Specific \*\*\*T\*\*\* - \*\*\*cell\*\*\* responses were detected in spleen cells of vaccinated mice and the profile of \*\*\*cytokine\*\*\* secretion in response to antigen 85 was indicative of a T.sub.h1 type of helper \*\*\*T\*\*\* - \*\*\*cell\*\*\* response (i.e., high IL-2 and IFN-.gamma.). Protective efficacy of an M.tb DNA vaccine was demonstrated in mice after challenge with M. bovis BCG, as measured by a reduction in \*\*\*mycobacterial\*\*\* multiplication in the spleens and lungs of M.tb DNA-vaccinated mice compared to control DNA-vaccinated mice or primary infection in naive mice.

=> s tuberculosis and esat-6

L7 957 TUBERCULOSIS AND ESAT-6

=> d kwic 957

L7 ANSWER 957 OF 957 USPATFULL on STN  
TI Polynucleotide \*\*\*tuberculosis\*\*\* vaccine  
AB Genes encoding *Mycobacterium* \*\*\*tuberculosis\*\*\* (M.tb) proteins were cloned into eukaryotic expression vectors to express the encoded proteins in mammalian muscle cells *in vivo*. Animals. . .  
SUMM \*\*\*Tuberculosis\*\*\* (TB) is a chronic infectious disease of the lung caused by the pathogen *Mycobacterium* \*\*\*tuberculosis\*\*\*. TB is one of the most clinically significant infections worldwide, with an incidence of 3 million deaths and 10 million. . . years. As alarming as these figures may seem, it is of even greater concern that multidrug-resistant (MDR) strains of *M.* \*\*\*tuberculosis\*\*\* have arisen. These MDR strains are not tractable by traditional drug therapy and have been responsible for several recent outbreaks. . .  
SUMM *M.* \*\*\*tuberculosis\*\*\* is an intracellular pathogen that infects macrophages and is able to survive within the harsh environment of the phagolysosome in. . .  
SUMM . . . studies using  $\beta$ -microglobulin- and CD8-deficient mice, CTL responses have been shown to be critical in providing protection against *M.* \*\*\*tuberculosis\*\*\* [Flynn et al, 1992, Proc. Natl. Acad. Sci. USA 89, 12013; Flynn et al, 1993, J. Exp. Med. 178, 2249; . . .  
SUMM Several potentially protective T cell antigens have been identified in *M.* \*\*\*tuberculosis\*\*\* and some of these are being investigated as vaccine targets. Recent work has indicated that the predominant T-cell antigens are. . . complex of proteins (85A, 85B, 85C) [Wiker and Harboe, 1992, Microbiol. Rev. 56, 648], ii) a 6 kDa protein termed \*\*\*ESAT\*\*\* - \*\*\*6\*\*\* [Andersen 1994, Infect. Immunity 62, 2536], iii) a 38 kDa lipoprotein with homology to PhoS [Young and Garbe, 1991, Res. . .  
DETD . . . by the genes comprising the polynucleotide. In one embodiment of the invention, the polynucleotide is a polydeoxyribonucleic acid comprising *Mycobacterium* \*\*\*tuberculosis\*\*\* (M.tb) genes operatively linked to a transcriptional promoter. In another embodiment of the invention the polynucleotide vaccine comprises polyribonucleic acid. . .  
DETD The Ag85A from *M.* \*\*\*tuberculosis\*\*\* was amplified from plasmid p85A.tub, which was prepared by ligating an 800 bp HindIII fragment to a 1600 bp HindIII-SphI. . .  
CLM What is claimed is:  
85A mature protein operably linked to transcription regulatory elements, wherein upon administration into a mammal free from infection with *Mycobacterium* \*\*\*tuberculosis\*\*\* or *Mycobacterium bovis* said mammal is protected from infection by *Mycobacterium* \*\*\*tuberculosis\*\*\* or *Mycobacterium bovis*.  
11. A method for immunization of a mammal against infection by *Mycobacterium* \*\*\*tuberculosis\*\*\* or *Mycobacterium bovis* comprising the administration of a DNA vaccine comprising a plasmid vector, said plasmid vector comprising a nucleotide. . . 85A mature protein operably linked to transcription regulatory elements, wherein upon administration into a mammal free from infection with *Mycobacterium* \*\*\*tuberculosis\*\*\* or *Mycobacterium bovis*, said mammal is protected from infection by *Mycobacterium* \*\*\*tuberculosis\*\*\* or *Mycobacterium bovis*.